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Market Reaction to Seasoned Equity Offerings: The Relevance of Leverage, Growth Opportunities, and Corporate Structure

by

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DOCTOR OF PHILOSOPHY

FINANCE

OLD DOMINION UNIVERSITY
November 1998

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ABSTRACT

Market Reaction to Seasoned Equity Offerings: The Relevance of Leverage, Growth Opportunities, and Corporate Structure

Mojib Ahmed
Old Dominion University, 1998
Chair: Dr. Kenneth Yung

Empirical work on the market's reaction to seasoned equity offerings has rarely considered the impact of the issuing firm's leverage level or it's corporate structure. This work is an attempt to include these parameters in order to better understand the market's reaction to such issue announcements.

The current finance literature recognizes the fact that leverage plays an important role in assessing the value of the firm. Leverage has both negative and positive impacts on the value of a firm (McConnell and Servaes, 1995), and thus, has both negative and positive impacts on the market's reaction to seasoned equity offerings. This work attempts to isolate the positive and negative impacts of leverage, and finds that whether the issue is viewed negatively or positively depends on the nature of the issue and the issuer's characteristics.

Contradicting the traditional view of the positive impact of growth opportunities on the market's reaction to issue announcements, this paper argues that the impact of growth opportunities on seasoned equity offerings should be negative. This is because most of the issuing firms are high growth firms, and the issue itself cannot be a success unless the issue implies a growth opportunity. The marginal growth impact of the issue becomes the dominant force in determining the direction of the market reaction. As the marginal growth impact of issue investment is greater for low-growth opportunity firms, the low-growth opportunity firms have a less negative market reaction to seasoned equity announcements than do high-growth opportunity firms. Additionally, high growth opportunity firms also suffer from a higher level of information asymmetry. The empirical findings overwhelmingly support the both arguments.

While examining the impact of corporate structure on the market's reaction to seasoned equity offerings, it is found that high-focused firm's seasoned equity issue announcements have a less negative market reaction than those of low-focused diversified firms. But firms which have increased their focus level in the recent past have a greater negative market reaction to an equity issue than do the firms which have decreased their focus. It is argued that issue announcements preceded by divestiture makes the market skeptical about the financing need of the issuer.

Co-chairs of Advisory Committee: Dr. Mohammad Najand
Dr. Vinod Agarwal

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Dedicated

To my wife Rina, my daughters: Aumee, Auree & Ayesha, who bore the brunt of the effort, and without their relentless physical and emotional sacrifices this work would not have been completed

In addition, to my parents who waited and waited to see this work complete more than anything else in this world

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I. INTRODUCTION

In a recent work, Lee, Lockhead, Ritter, and Zhao (1996) documented that the average cost of raising external capital for U.S. corporations is higher for equity based[1] financing than debt based financing. Using data from 1990 to 1994, they found that the average direct cost of financing from initial public offerings (IPOs) is about 11.0 percent. The average direct cost for seasoned equity offerings (SEOs) is 7.1 percent. For convertible and straight debt the costs are 3.8 percent and 2.2 percent respectively[2]. Yet, the total number of equity (IPOs and SEOs) offerings are about three times the debt (convertible and straight) offerings.

Lee, et. al.(1996), also documented that the number of seasoned equity issue events surpasses the combined total numbers of convertible and straight debt issue events. During the same period(1990-1994) the number of seasoned

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[1] Equity sold to the new investors. It is possible that some of the new investors are existing shareholders

[2] It is possible that the reported cost of debt issue does not include the implied cost of issuing debt, such as bankruptcy cost, agency cost and so forth.

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equity offering events was 1.5 times the number of straight debt issuing events. The puzzling part of these findings is that a lot of empirical studies indicate that the stock market reaction to equity offering is significantly negative and therefore value decreasing for the issuing firm.

On the other hand, some studies do find insignificant positive market reaction to seasoned equity offerings. The works that have reported the percentage of positive responses include: Barclay and Litzenberger (1988), Bradford (1987), Choi, Masulis, and Nanda (1992), and Varma (1995). The reported numbers of significant positive responses range between 19% (Barclay and Litzenberger) and 27% (Varma). Thus it seems that about one-quarter of the sample firms experience positive abnormal returns with the announcement of seasoned equity financing. Thus, if equity issues are value decreasing, then why are so many firms choosing to issue equity?

Given the dichotomous evidence of negative and positive market reaction to equity offerings the present work contributes to the literature by making an empirical assessment of how a firm's leverage and growth opportunities would affect the market reaction to firm's seasoned equity

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offering. The significance of this contribution is that so far, the effect of leverage and growth opportunities have been considered in isolation without any consideration of their possible mutual interaction. This study also contributes to the current literature by examining the impact of corporate structure on seasoned equity issue announcements. The examination of issuing firm's leverage, growth opportunities and corporate structure is expected to provide some missing pieces of the puzzles related to the issue of seasoned equity offerings. This would facilitate a more accurate understanding of the market's behavior around the seasoned equity announcements.

The remaining part of the paper is organized as: Section II - reviews the empirical and theoretical researches on the valuation effect of equity financing; Section III - addresses the impact of issuing firm's existing leverage on the value of the issuing firm's at the announcement of such issue and different hypotheses were developed. This section also develops hypotheses regarding the impact of diversification on the market reaction to seasoned equity offerings. Section IV - describes the data collection process and outlines the methodology. Section V

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contains the results of the event study and cross sectional analysis of the hypotheses developed in section III. Finally, Section VI concludes the study.

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II. LITERATURE REVIEW

Prior to Modigliani and Miller's (MM) capital irrelevance theory (1958), the corporate capital market was not as sophisticated as today. The capital market at that time consisted fundamentally of equities and occasionally debt. Debt was viewed as a necessary evil (Donaldson, 1963). Firms would only issue debt when equity issues were not a viable option. In 1963, the MM tax correction paper changed manifestly the attitude of academics towards debt to a warm embrace. More recently, finance researchers have broadened their view on debt financing and have identified other associated benefits and detriments. Today whether a new investment should be financed through equity or debt or a combination of both depends on the relative cost[3] and benefit of such financing on the value of the firm. As managers try to maximize shareholder's wealth, reaction of

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[3] These costs include all direct costs, such as, the cost of issue, impacts on the overall cost of capital, and indirect costs, such as, the agency cost of debt, and the agency costs of managerial discretion.

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the capital market assumes a crucial role in the choice of corporate financing[4].

There have been extensive efforts by researchers to isolate the differential impacts of each type of offering. Smith (1986) put forth four generalizations of the impact of external financing on the value of the firm that previous empirical research had discovered:[5] (1) External financing does not increase the value of the firm; (2) Equity financing is more value decreasing than debt or preferred stock financing; (3) Debts which are convertible to stock carry a greater negative impact than those which are not convertible; and (4) Industrial firms suffer more value loss with external financing than do Utilities.[6]

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[4] For example, capital market prices provide vital signals for corporate investment decisions

[5] Increase or decrease in the value of the firm is measured using abnormal return associated with the announcement of such offering around the event date.

[6] For details of the empirical researches please refers to: Asquith and Mullins (1986), Kolodny and Suhler (1985), Masulis and Korwar (1986), Mikkelson and Parch (1986), Schipper and Smith (1986), Pettway and Radcliff (1985), Linn and Pinegar (1985), Dann and Mikkelson(1984), Eckbo (1986).

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The following is a review of the theories on the impacts of financing decision on the market reaction to seasoned equity offerings.

A: Seasoned Equity Offerings & Information Asymmetry

In 1984, Myers and Majluf presented the seminal paper, "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have". The model developed therein overwhelmingly supports the findings of existing empirical researches. The model holds that equity financing always has negative consequences due to the existence of information asymmetry between the management and the existing stockholders with respect to the firm's assets in place and with respect to the net present value of the new investment project.

Under the theory of separation of ownership and management[7], the investors do not have direct access to the inside information about the firm's assets in place as well

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[7] The concept of separation of Ownership and management and the research work on this area can be traced back to as early as Berle and Means(1932).

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as to the net present value of the investment to be undertaken through the new financing. Management, by virtue of their inside position, possesses more information about the value of the firm (i.e., the assets in place) as well as the intrinsic value of new projects. Investors, on the other hand, learn about the value of the business and about any new investment project through the market and from the signals management provides from time to time.

In the Myers and Majluf model, as new investment opportunities become available, management will try to maximize the wealth of current/existing shareholders. If faced with a new project, the decision to issue equity to finance the project conveys a signal to the market that management feels the firm is overvalued in the market. Investors, being aware of this behavior of management, will attempt to protect their own interests when a seasoned equity issue occurs by re-valuing the stock, thus leading to a negative market reaction. Thus, according to Myers and Majluf's Information Asymmetry Theory firms never issue equity if it has the opportunity to use other means of financing.

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The information asymmetry theory also suggests that there exists a positive correlation between the level of information asymmetry and the level of value drop in the event of equity financing (Dierkens, 1991). Based on Myers and Majluf's information asymmetry theory, Dierkens (1991) concluded that increases in the information asymmetry between management and stockholders, will significantly increase the drop in price of the stock observed at the equity issue announcement. A timing test (Dierkens, 1991) also showed that firms time their equity issue announcement when the level of information asymmetry is relatively low. In the extreme, a fully levered firm should suffer minimal value loss due to the absence of information asymmetry, whereas, a fully unlevered firm should suffer maximum value loss due to the maximum level of information asymmetry.

B: Seasoned Equity Offerings & Growth Opportunities

While many empirical researchers confirmed Myers and Majluf's prediction's concerning seasoned equity issues, a separate strand of literature challenges the model's

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prediction of seasoned equity offerings of always having a negative effect on firm's value. Their argument is based on the Growth Theory literature, where it is argued that market's reaction to seasoned equity offerings is a function of the issuing firm's level of growth opportunities when the financing decision is announced. Some researchers have used the book-to-market ratio as a proxy for growth opportunities of the firm, while most of others have used Tobin's Q as a measure of firm's growth and/or growth opportunities.

While examining the market reaction to equity issue announcements Barclay and Litzenberger (1988) found a positive but insignificant correlation between the announcement returns of the issuing firms and their Tobin's Q ratios. Kato and Schallheim (1992) found that the two-day market model prediction errors for 63 Japanese public equity announcements during the 1970s were on average negative, but the prediction errors were positive for the 113 announcements during the 1980s. The book-to-market value ratio for the respective two periods were 2.72 for 1970s and

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5.87 for 1980s, and both results were statistically significant[8].

Denis(1994) reported that the equity issue announcement effects are significantly negative for low-growth firms, but not significantly negative for high growth firms. The findings are confirmation of the theoretical modification of Myers and Majluf's(1984) model by Cooney and Kalay(1993). The modified model shows that always-negative outcome of equity issuance on the value of the issuing firm is a direct outcome of Myers and Majluf's assumption that the net present value of the project a firm is facing is always non-negative. In other words, Myers and Majluf's model does not allow for the most straightforward possibility that a firm may not issue new equity just because all available projects have negative net present value. The modified model also supports the view of Barclay and Litzenberger (1988) who argued that positive announcement effects are not merely a noise. Barcley and Litzenberger (1988) found that about 17% of the stocks trading in the first 15 minutes after an equity announcement had non-negative (of which 7.8% is

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[8] It is important to mention that this finding is more just merely the result of differential accounting practices in Japan.

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positive) returns. During the next 15-minute interval, 49% had non-negative (of which 26.7% is positive) returns[9].

Using Miller and Rock's (1985) model, Pilotte (1992) argues that the stock price reaction to new financing depends on the market's imperfect assessment of the offering firm's growth opportunities. Ambarish, John and William (1987) construct a model in which financing and dividends convey information about the value of the assets in place and/or the value of the growth opportunities of the issuing firm. They argued that for a mature firm the predominant source of information is assets in place as their growth opportunities are limited, hence, the announcement effect should be negative. For a rapidly growing firm the predominant source of information asymmetry are the growth opportunities, thus, the effect should be positive[10].

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[9] As it is obvious that the variance of the daily returns are much higher than 30-minutes return variance, it is safe to conclude that the positive returns observed were not merely the product of noise.

[10] Ambarish, John, and William (1987) assert that their model correctly reflects the existing literature as most of the studies only includes New York Stock Exchange and American Stock Exchange and firms listed in these exchanges are mostly mature firms.

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Jensen (1986)'s Free Cash Flow Theory also supports the argument of Ambarish, John, and William's above argument. Free Cash Flow Theory argues that the presence of free cashflow reduces the value of the firm. It is expected that mature firms should have more free cashflow than the growth firm due to their limited growth opportunities. The higher the cashflow, the more likely that money will be spent unwisely because, agency theory suggests that managers always have incentives for increasing the size of the firm beyond optimum. Therefore, when market sees that a mature firm is expanding through equity issuance it reacts negatively as such increase in the cash flow may cause the increase in organizational inefficiencies. On the other hand an equity issue by a rapidly growing firm should signal manager's intention of maximizing organization's wealth through investment in new project.

Recent empirical works have produced some very different results while examining the relationship between issuing firms growth opportunities and announcement effect of seasoned equity offerings. Investigating the long term performance of equity issuers, Gombala, Lee, and Liu, (1998) observes that growth firms are performing poorly in the long

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run when compared to low-growth firms. Their argument is that overpricing is greater for the high-growth opportunity firms than the low-growth opportunity firms, hence, high growth opportunity firms under-perform low growth opportunity firms. In another recent work McLaughlin, Safieddine, and Vasudevan (1998) has documented that market reaction to seasoned equity offering is more negative for high growth opportunity (Tobin's Q) firms than the low growth opportunity firms. They argued that high growth opportunity is associated with high level of information asymmetry between the investors and managers, and hence leads to higher negative market reaction to seasoned equity offerings. They also argue that bigger firms have lower level of information asymmetry than the smaller firms, because for smaller firms fewer analysts follow the company[11].

[11] Opler and Titman(1995) also used firms size as a proxy for information asymmetry.

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C: Seasoned Equity Offerings & Leverage

The impact of leverage on firm value is extensively analyzed in the finance literature on Agency theory. Apart from the benefit of leverage through decreasing information asymmetry between shareholders and managers, and also the minimization of the overall cost of capital of the firm as addressed by the traditional finance theory, a firm's debt level may affect the ability of the firm to materialize all possible future net present value projects. Myers (1977) called this problem as 'underinvestment problem'. Jensen and Meckling (1976) called this the opportunity cost of not being able to finance good investment projects, i.e., 'the agency cost of debt'[12,13].

One major implied assumption of Myers and Majluf's (1984) model is that the firm making the equity issue

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[12] Discussion on this is restricted to the extend it is relevant to the paper.

[13] Agency theory suggest that there exist conflicting interest between the insiders and outsiders(stockholders and debtholders) of a firm. Jensen and Meckling(1976) argue that unless the management holds 100% of the equity of the firm, there exists sufficient ground to believe that managers have incentives for not acting at the full interest of the stockholders. (for more detail on the subject please refer to Jensen and Meckling(1976)

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announcement is an unlevered firm, hence there is no agency cost of debt. However, most firms in the market are levered firms. In levered firms, in addition to existing and potential stockholders, there are creditors who also monitor the activities of management, then, it can be argued that the market has more information about the firm and it's management's activity. Thus, the existence of debt in the firm's capital structure decreases the level of information asymmetry between the outside investors (both stockholders and creditors) and the management. Thus, the greater is the level of leverage, more is the level of monitoring, therefore, the lower is the level of information asymmetry and vice versa.

Lang, Ofek, and Stulz (1996) explored the relationship between leverage and future growth opportunities for all Compustat firms over the period of 1970 through 1989. They found that for firms with poor investment opportunities, book leverage[14] is strongly negatively correlated to the various growth measures[15]. Titman and Wessels (1988), and

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[14] Calculated as book value of debt over total assets.

[15] The growth measures used are Subsequent growth in number of employees and Capital expenditure.

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Smith and Watts (1992) also documented a negative relationship between the investment and/or growth opportunities and firms leverage ratio.

Raymar(1993) argues that an equity issue may be a positive event when a firm has bonds outstanding. Thus, he argues that, financing need not follow a pecking order in which debt is the first choice of a quality firm. His reasoning for positive signaling is that "... a low-value firm faces greater default risk than a high-value firm so that its bonds have lesser value. Although the low-value firm may be able to issue overpriced stock, it might instead offer new debt if equity causes the value of old bonds to be much higher. The market would then view equity as a favorable signal that the risky low-value firm would not imitate" (Raymar, 1994, p322). Raymar then developed a model where he examined a full set of possible outcomes in the presence of debt. He showed that in the presence of sufficient degree of leverage and default risk a positive market response is possible for equity issuance.

The issue of agency cost associated with equity financing is strongly addressed by Jung, Kim, and Stulz (1996). They argue that by assuming the issuing firms are

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unlevered (by the empirical research), the agency cost does not go away. Taking the assumption of Myers and Majluf's unlevered firm, Jung at el. argue that if the issuing firm is unlikely to have valuable investment opportunities (i.e., low Q firms) then the news of managers making equity announcement conveys the impression that the firm is faced with unforeseen investment opportunity which managers can not pass over, if they (managers) want to maximize the value of the firm (i.e., maximizing the value of existing stockholders). In such cases, the effect of such announcement is expected to be positive. But as soon as the issue of agency cost of managerial discretion is introduced such issuance is no longer a good news, rather it is more of a bad news. It is likely that if the project is not a net present value project managers will prefer to use equity over debt, because debt financing for a negative net present value project reduces managers discretion over the firms resources (Jung et al., 1996).

More interesting is when the firm under consideration is a levered firm. McConnell and Servaes (1995) concluded that high-growth firm's corporate value is negatively

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correlated with leverage, and for the low-growth firm the correlation is positive. Their argument is that if the firms have plenty of growth opportunities then leverage will force the firm to give up positive net present value projects, on the other hand if a firm's growth is low such prevention will help to avoid manager's decision to take negative investment projects. Lang, Ofek, and Stulz (1996) also documented a negative relationship between the growth opportunities of a firm and the leverage for the low growth firms. Therefore, an examination of the impact of leverage, by recognizing both negative and positive effect of leverage, on the equity issuing firm's value change in the market at the announcement of such issue should be able to shed light on many of the unexplained parts of the previous empirical works in this area. Thus, the main contribution of this paper is the inclusions of issuing firms leverage in the analysis of understanding the stock price behavior of new equity issuance announcement.

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D: Seasoned Equity Offerings & Diversification

It is interesting to observe that researchers in the past have not recognized the impact of corporate diversification on explaining market reaction to seasoned equity offerings. The empirical evidence has already established that diversification (i.e., corporate structure) has direct bearing on the value of a firm. Weston (1970), and Williamson (1975) argue that diversified firms are capable of forming an internal capital market where the internally generated funds can be pooled and allocated in the most efficient way. Teece (1980) argues that diversification helps firms to achieve the economies of scope and the economies of scale. In a very recent work, Stein (1997) argues that a diversified firms can efficiently distinguish between a good division and a bad division and then allocate the resources in the most appropriate way and thus enhance the value of the firm.

Lewellen (1971) showed the benefit of coinsurance through diversification and found that diversified firms have a greater debt capacity then do non-diversified firms. Chandler (1977) found that a Multi-divisional firm would be

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able to create specialized divisions and thus benefit from the inherent efficiency of task specialization. Stulz (1990) argues that diversified firms are capable of reducing the underinvestment problem through the creation of a larger internal market. Shleifer and Vishny (1992) argued that conglomerates will have a higher debt capacity because in a bad state of the world they can sell assets in those industries that suffer from liquidity problem.

Another great advantage of diversification is that these firms are expected to have lower tax payments compared to the sum of what they would have been paying as separate entities. Majd and Myers (1987) mention that taxes are paid to the government if the firm's income is positive but does not receive a refund if the firm incurs losses. Even with the introduction of loss carry forward provisions, the tax benefits of diversification have not been eliminated fully.

The arguments from the opponents of diversification are getting stronger in the current finance literature. These researchers focus their arguments on the cost of diversification to the firm. Amihud and Lev (1981) mention that managers prefer diversification in order to protect the value of their human capital. Based on Jensen (1986)'s free

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'cash flow theory' as well as 'agency theory' researchers argue that as managers always benefit from managing larger firms. Therefore managers of diversified firms, are more likely to indulge themselves in value decreasing investment projects (Berger and Ofek, 1995). Based on a similar argument Meyer, Milgram, and Robert (1992) argued that a failing firm, when standing alone, can not have a value less than zero, but under the conglomerate structure, the failing firm may have a negative value. The other division(s) carrying the failing division(s) will ultimately reduce the value of the conglomerate.

The empirical evidence is also very strong against diversification. Except for Matsusaka (1993)[16] there is very little empirical evidence that supports the benefit of diversification. Morck, Shleifer, and Vishny (1990) documented that the announcement of unrelated acquisition results in a negative market return. Lang and Stulz (1994), and Berger and Ofek (1995) have found that diversified firms trade in the market at a discount between 13 to 15 percent compared to a portfolio of single segment firms in the same

[16] Matsusaka(1993) found positive bidder returns at the announcement of conglomerate acquisitions in the late 1960s and early 1970s.

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industry[17]. While examining the sensitivity of cashflows of one segment to another, Shin and Stulz (1997) found that the cross subsidization among the segments is inefficient.

Myerson(1982), and Harris, Kreiebel, and Raviv(1982) examined the information asymmetry cost between central management and divisional managers in decentralized firms. They concluded that information asymmetry costs are higher in conglomerates than in more focused firm, since information is more dispersed within the conglomerates. Thus, they argue that diversified firms are less profitable than they would be if their separate lines of business would operate independently.

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[17] A similar finding is also observed for Japanese and UK firms(Lins and Servaes, 1997).

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III. THE ISSUES & HYPOTHESES

The empirical and theoretical investigations of equity financing and its impact on the value of the existing stock price have concentrated around the two main theories: the Information Asymmetry Theory and the Growth Opportunity Theory. It is not clear why researchers fail to accommodate the issuing firm's leverage level and corporate structure in the understanding of the market reaction of the issuing firms. The objective of this study is to re-examine the effects of seasoned equity issue announcements on the market value of such firms from the levered firm's perspective and also from the perspective of the corporate structure of the issuing firm to understand the impact of such offerings.

A: Leverage, Growth, & Seasoned Equity Offerings

a) The Impacts of Leverage & Seasoned Equity Offerings: The term information asymmetry here refers to the inequality

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of information about the firms' assets in place and the inequality of information about the net present value of the new investment between the managers and existing stockholders. The seasoned equity issue event not only reflects the fact that the issuing firm is undertaking a new investment, but it also alters the issuing firm's existing capital structure, (i.e., decreases the leverage ratio). As argued before, leverage has a negative association with information asymmetry, so an equity issuance will lead to an increase in the level of information asymmetry for the issuing firm. If the firm is already a high-levered firm, the level of information asymmetry of the firm before the issue was lower than after the firm issued new equity. Therefore, the marginal increase in the level of information asymmetry will be higher (lower) for the high-levered (low-levered) firm as the firm decreases its leverage level. As Dierkens (1991) concludes, an increase in information asymmetry will lead to a more negative valuation effect of the high-levered firm's equity issuing decision, thus:

H1: *If the information asymmetry impact of leverage dominates the market reaction to*

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seasoned equity offerings, then a High-Levered firm should experience greater value loss than a Low-levered firm at the announcement of a seasoned equity offering.

Leverage of a firm can also effect the future growth opportunities of the firm (McConnel and Servaes, 1995), and thus effect the announcement day abnormal return of the seasoned equity offering. In the finance literature the value of a firm is known as the discounted net present value of the firms' future investment projects. As leverage reduces the capacity of firms to materialize all possible investment opportunities the value of the firm must also be lower for highly levered firms. As equity financing results in the decrease in the leverage ratio, such an action increases the opportunity to materialize the future investment projects, and thus, such an action should increase the value of a highly levered firm at the announcement of such issuance.

Moreover, a highly levered firm's decision to issue costly equity[18] may well be the result of the fact that the

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[18] Equity issuance is a more complicated process, where, under some circumstances managers may need to seek permission from the existing equity holders. The process

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project the firm is facing is too good to pass over. And due to their high existing level of leverage, the issuing firms do not have the choice of using other methods of financing. Thus, by issuing equity, a firm increases it's debt issuance capacity in order to be able to undertake future investment projects. This also decreases the problem associated with high leverage (i.e., inability to capitalize all future value increasing project). Additionally, the firm is also signaling that it is faced with a good investment project that can not be passed. Under this circumstance, one should expect that such equity financing should have a positive market reaction upon issue announcement.

If the firm is unlevered[19] or low-levered, the marginal value of increasing the opportunity to fund future positive net present value projects is not as significant as it is for the high levered firm. Unlevered or low-levered firms

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is also time consuming. Whereas, the debt issuance is faster and less complicated. The timing aspect of accepting investment project is so important that if action is not taken in time then the project becomes worthless. This signifies the importance of debt (the less time consuming process) capacity in capitalizing the future investment project.

[19] As assumed in Myers and Majluf(1984).

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do not face the problem of foregoing the investment opportunities if equity is not issued. For these firms the option to choose low cost financing through debt is available. Therefore, for these firms, the inability to issue debt should be negatively viewed by the market as management's inefficiency in choosing cheaper methods of financing, and hence should result in value decreasing outcome of such announcement. Thus, leverage of a firms can effect the market reaction to seasoned equity offerings positively, and this will happen when the growth impacts of leverage is dominant. Thus:

> *H2: If the growth impact of leverage dominates the market's reaction to seasoned equity offering, then High-levered firms should experience positive valuation effects at the announcement of seasoned equity.*

b) The Growth Opportunities & Seasoned Equity Offerings: Understanding of the leverage impact of growth would be incomplete without knowing the impacts of growth opportunities on the announcement of seasoned equity offerings. According to growth (opportunity) theory, if a

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firm possesses the quality of high growth opportunities, this implies that the firm has a continuous flow of good investment projects. Thus, the value of the firm must be higher for high growth firms than the low growth firms.

The theoretical arguments in favor of positive impact of growth opportunities on the value of the firms at the announcement of equity issuance are very strong (Cooney and Kalay, 1993), Jensen (1986)). But unfortunately the empirical findings are not that supportive (Barclay and Litzenberger (1988), Pilotte (1992), Denis(1994)). Results of the study by Denis (1994) documented a non-monotonic positive relationship between announcement period prediction errors and several ex ante measures of growth opportunities by a small sample of younger, higher growth firms. Ambarish, John, and William (1987), argued that firms listed in the New York Stock Exchange and in the American Stock Exchange are mostly mature firm (which implies that these firm's growth opportunities are limited). Thus, it is argued here that the way previous empirical researches have defined growth opportunities of a firm may need to be adjusted to properly reflect the market view of growth opportunities and/or existing growth level of a firm.

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Using information asymmetry argument, in a more recent work, McLaughlin, Safieddine, and Vasudevan (1998) has documented that firm's with high Tobin's Q has more negative reaction to seasoned equity offerings than low Tobin's Q firms as high level of growth is associated with high degree of information asymmetry (Smith and Watt, 1992). In another work Gombala, Lee and Liu (1998) argues that high Tobin's Q (high growth opportunity) firms are more over-valued in the market than the low Tobin's Q firms. Therefore, market reacts more negatively to the issue announcement by the high Tobin's Q firms.

It is argued in this paper that other factors imbedded in the growth opportunity proxy, i.e., the Tobin's Q, may be causing the negative affect. The most probable cause could be the fact that a low-growth opportunity firm's decision to issue carries more marginal good information than that of the high-growth opportunity firms. As a result low-Tobin's Q (low-growth opportunity) firms have less negative impact (market reaction) than the high-Tobin's Q (high-growth opportunity) firms. For the low-growth opportunity firms, the arrival of good investment projects is not as usual as it is for high-growth opportunity firms. Thus, the issue

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announcement, which itself is a good news, creates a marginal dominance of good information in favor of low-Tobin's Q firms. Hence:

H3: *Firms with high growth opportunity should experience more value loss at the announcement of seasoned equity offering than firms with low growth opportunity.*

C) Simultaneous effect of Growth Opportunities & the Impacts of Leverage: The subsection (a) of this section implies that seasoned equity issuing firms existing leverage level can effect the market reaction to such issue announcements in either negatively (H1) or positively (H2). And the subsection (b) argues that the growth opportunities of the issuing firm should have negative impact on market's reaction to such offering. Therefore to understand the combined effect of growth opportunities and the impacts of leverage, examination need to be done from two perspective, first: where the negative impacts of leverage is dominant, i.e., the information asymmetry aspect of seasoned equity issue announcement is dominant(H1). Higher the level of

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existing leverage more is the marginal increase in information asymmetry due to the equity issuance. For a, the high growth opportunity firms, as it is argued before, the marginal growth impact from the investment is not that of significance. Additionally, as argued by McLaughlin et al (1998) the information asymmetry is higher for high growth opportunity firms, and the over-valuation of these firms are also high (Gombala et al 1998). Therefore, it is most likely that high growth firms with high leverage should experience the most value loss at the announcement of such offerings. Thus:

H4: If information Asymmetry impact of leverage (H1) is dominant then high-levered high-growth firms should have maximum value loss at the announcement of seasoned equity offerings.

Second, from the perspective of growth impact of leverage, i.e., firms with high leverage level will have more positive growth impact at the announcement of seasoned equity offerings. If firms belong to the low growth

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opportunity group, the arrival of a good investment project is an unexpected event. In view of that, the effect of firms existing leverage level gets more interesting. If these low growth opportunity firms have high leverage, then an announcement of equity financing reflects several pieces of 'news': (1) the firm has unexpectedly found a positive net present value investment project[20], and if this project is rejected, the arrival of another project is uncertain; (2) by issuing equity, the firm is not only financing a new project, it is also creating a provision for future projects without equity financing (i.e., increasing the capacity to finance future projects at less cost); and (3) for these high levered firms the equity issue decision is a foregone conclusion, because, due to the existing high leverage level, further debt financing is not possible. Equity issue is their only way to finance the project. Therefore, the marginal cost of forgoing the investment project is significantly higher for these firms due to the limited growth opportunities. Additionally, the marginal growth

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[20] Empirical evidence in the finance literature has already efficiently documented the impact of good and bad 'news' on the value of the firm as well as the markets reaction to such 'news'.

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impact of these low growth opportunity firms are more positive The market, thus, will react positively (or less negatively) to the announcement of seasoned equity offering for these low-growth opportunity high levered firms. Thus:

H5: If growth impact of leverage(H2) is dominant the high-levered low-growth firms should experience the least value loss at the announcement of seasoned equity offerings.

B: Corporate Structure & Seasoned Equity Offerings

Researchers have established that diversification increases the asymmetry of information between the managers and shareholders about the value of the firm (Myerson (1982), Harris, Kreiebel, and Raviv (1982)). They argue that increased diversity makes it difficult for the shareholders to get all the information about the firm as efficiently as the managers of the firms.

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Apart from the information asymmetry issue there are other factors that also contribute negatively to the value of a diversified firm. Jensen (1986), Amihud and Lev (1981) and Morck, Shleifer, and Vishny (1990) have documented empirical evidence in support of the 'free cash flow' theory arguing that managers prefer diversification in order to protect their human capital. In 1989, Shleifer and Vishny found evidence to support the argument that managers diversify, because through diversification they are capable of making their skills more indispensable to the firm.

Proponents of diversification have argued that diversification helps firm to raise capital at a lower cost. As these diversified firms have debt capacities that are higher than the non-diversified or focused firm (Lewellen, 1977), market is surprised to see that these firms are issuing equity instead of debt to finance investment project. Such action of a firm increases its' 'over-investment problem' and /or problem associated with the inefficiency of management. Empirical evidences have already established that equity issuance is a costly action as well as a value decreasing event, when there is debt capacity available the issuance of equity is certainly a bad

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news. On the other hand, if the firm has already exhausted its debt capacity, then the possibility of over-investment becomes a concern to the outside investors. In either cases one should expect that the market reaction to seasoned equity offering will always be negative for a diversified firm. Thus:

H6: *Diversified firms issuing seasoned equity should experience a more negative reaction at the announcement of such issuance when compared with non-diversified firms.*

The discussion on the issue of corporate structure and its impact on the seasoned equity issue announcements would be incomplete if the discussion does not cover the impact of the market's knowledge about the issuing firms past structural change, i.e., changes in the focus or diversification level. The most relevant structural change in this context are the reduction of existing lines of business through the selling of existing segments in order to increase the focus, and/ or the acquisition of new segments to widen the corporate diversity and hence reducing focus.

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Recent empirical work in this area has documented that increasing focus is associated with increase in the value of the firm (Berger and Ofek (1995), John and Ofek (1995) Comment and Jarrell (1995)). This positive effect is due to the markets understanding that these firms are now (after selling of segments) capable of managing the corporation more efficiently than before.

In this paper it is argued that in addition to the arguments suggested in the literature, there are other factors that also contribute to the positive association to such focus increasing activity to the value of the firm. These firms, after taking divestiture action, have more assets in place to invest in future net present value projects than before, thus, are capable of maximizing their value through *not* passing over good investment projects. Therefore, it is very likely that these firms should gain value in the market, as long as market value of a firm is based on the discounted present value of the future investment projects attainable to the firm.

But when these firms decide to go to the market in the subsequent years of focus increasing activity, the market becomes suspicious about the activity of the management and

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also becomes skeptical about the presence of positive net present value in their future projects. Additionally, it remains unclear why these firms are issuing equity, even if they have good investment projects. If they have used the funds collected from the sale of assets to pay off debts then they should have debt capacity outstanding. If they have not used up their funds, then they should have outstanding cashflow, which should be used to finance the new investment rather than issuing equity. The market will not become suspicious only when the firm has already spent the funds on investments and now there is a genuine need for new investment capital. Thus:

H7: *If the seasoned equity issuing firm has increased it's focus in the recent past, then the amount of negative effect of such issuance will be the largest.*

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IV. DATA & METHODOLOGY

A. DATA

The seasoned equity offerings from 1983 through the end of 1994 were hand collected from the bi-annual publication *Investment Dealer's Digest*[21]. The data collected from the above source includes: the offering date, the offering price, and the number of shares offered. The financial year end date for each firm was collected from the Wall Street Journal Index (WSJI)[22]. These dates are then cross checked with the WSJI.[23]. If the issue is reported in the WSJI and has a different offering date then the event date is changed to the date reported in the WSJI *minus one*.

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[21] Until first half of 1988 the publication was called as "*the Directory of Corporate Financing*" and from the second half of 1988 it is known as "*The Corporate Financing*".

[22] Financial yearend dates are needed to align the financial data from the Compustat, and to determine in which financial year the particular issue is made.

[23] It is important here to mention that the Wall Street Journal Index does not report issue announcements as often as it used to do until the first half of 80's.

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The WSJI generally reports different dates for an offerings. These dates are: The date of plan to offer; date of registration with the Securities and Exchange Commission (SEC); The offering date; The offering completion date; and offering withdrawal date. The offering date collected from the primary source (publication of Investment Dealers Digest) is used as the base[24] date.

Initially, 4876 issue events were identified with the criteria that the issue must be either a pure primary seasoned issue (henceforth Seasoned Issue) or a combination of primary and secondary seasoned issue (henceforth called Combined Issue) offered at the same date. An issue is called 'seasoned' if the issue is not an initial public offering. Secondary issues are issues where existing block stockholders sell significant portions of their holdings in the open market[25].

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[24] The reason it is called as base date is because paper do not intend to include dates other than Offering announcements in the event window. It is found in the Wall Street Journal Index that there are cases where a plan to offer came two months, three months even six months earlier, or registration for the offering was done as early as three months earlier than the actual offering. It is also found that some of the reported offer completion date is well after the initial offering announcement.

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The following criteria were set for each event to be a part of the sample for the reasons described below:

a: For the financial data, Compustat Annual data tape of 1996 (hereinafter, Compustat) is used. If the sample firm is not in the data tape then events related to that companies are deleted from the sample.

b: For market data, the daily return data tape of the Center for Research in Security Price (CRSP) for period ending December 31, 1996 is used. Abnormal return calculation methodology requires that each sample event must have return data for -187 days from event date up to +15 days from event date. Sample events failing to meet these criteria were also dropped from the sample.

C: In order to avoid the confounding effect, those sample events were deleted which have seasoned or combined issues within the past 12 months or within the subsequent 12 months[26] of the event date. In case of firms making multiple

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[25] Those combined offerings are dropped where the secondary offering were not registered with the Securities and Exchange Commission, because unregistered offerings are expected to have different market impacts than registered ones.

[26] It is important here to recognize certain facts about the Compustat annual data tape. First, Data tape do not report the financial year end date for the reporting

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issues within the event period (1983 through 1994)[27] the earliest event is first considered provided there is no seasoned or combined offering in the past 12 months of such offering. For a second event to be considered in the sample from the same company the event must be at least 12 months apart from the first offering provided no similar offering took place within the subsequent 12 month period.

d: To avoid possible information contamination around the sample event date from offerings other than seasoned or combined offerings (such as offering of debt, convertibles etc.) sample events were also eliminated where such events

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companies, rather it only reports the month of the financial year end. Second, Reporting year in the Compustat is not same as financial year end (for more detail please refer to Compustat User guide). Telephone discussion with Compustat revels that when a company/firm change its financial reporting date, the financial data reported in the Compustat does not reflect the annual financial data for the surrounding years of such change. Examination of several firms confirms the limitation. Therefore, in order to avoid the chance of using non-annual data for cross sectional analysis sample firm and associated events were dropped if the firm has changed its reporting date within the sample period.

[27] The event period for the study is 1982 through 1995, because each of the surviving sample firms fits the criteria that no sample has similar event one year prior or one year after the first event.

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(such as offering of debt, convertibles etc.) were present within 30 days surrounding the sample event date.

e: Also deleted were those events associated with firms which were not listed in the American Stock Exchange (AMEX) or in the New York Stock Exchange (NYSE)or in the NASDAQ Market System (NASDAQ)[28].

The above selection criteria brought the sample down to 1353 sample events for 984 companies over a period of 12 years (1983 to 1994). Table 1 shows the sample collection and elimination process.

[Insert Table 1 about here]

Table 2 shows the distribution of sample events and sample firms by event year and by exchange listing, and also by event year and by the Industry[29]. A total of 807 sample

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[28] For exchange classification, Compustat data item "Exchange Listing and S&P Major Index Code" (If the Compustat exchange listing codes(ZLIST) are 01, 02, 03, 04, and 10 then firms are from New York Stock Exchange; if codes are 05, 15, 16, 17, and 18 then firms are from American Stock Exchange; and if codes are 21, 22, 23, 24, and 25 then firms are from NASDAQ National Market System.) was used.

[29] In defining industry we used Compustat supplied Standard Industry Classification (SIC) code. If the first two

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events from 570 firms are from the New York Stock Exchange (NYSE), 108 (76 sample firms) and 438 (338 sample firms) sample events were from the American Stock Exchange (AMEX) and the NASDAQ Market System (NASDAQ) respectively. For 1353 sample events, 926 (715 sample firms) events belong to the Industrial category and 236 (164 sample firms) events are from the Financial and Banking category. The balance of 191 sample events (105 sample firms) belong to the Utilities group.

[Insert Table 2 about here]

Sample events are grouped by the number of times the issuer completed the issue with in the sample period (hereinafter, Multiplicity of the Issue). If the issuer issued more than one issue, then the issue is identified as 'multiple' issue and those who issued once in the sample

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digits of the SIC code is 49 then we classify the firm as Utilities, if the first two digits are between 60 and 69 (both inclusive) then the firms are Financial and Banking, and all others are classified as Industrial (Slovin, Sushka, and Polonchek, 1992). Appendix A contains the distribution of sample events by the Two-digit Standard Industry Classification (SIC) code for both total sample and Segment sample.

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period are called 'single' issue. The justification for this type of classification is that multiple issuers are known to the market and the level of information asymmetry about the firms value between the investors(market) and the firms(managers)is much less than that of the single issuers, who came to market for the first time. It is expected that the negative reaction to seasoned offerings will be significantly less for the multiple issuers than the single issuers. On the contrary, Thakor(1993) developed a model based on information asymmetry and argues that the negative reaction to equity issuance, in magnitude, increases with the increase in the frequency of prior equity issuance, i.e., price reaction to cash stock piling is negative.

There are 753 sample events belongs to the single issuer, of which 572 from the industrial sample, 129 events from banks and 52 from utilities(table 3). Out of 600 multiple issue events 354 events are from industrial group, 107 events from the banks and 139 events from utilities. Interesting to notice that the proportion of multiple issue is much greater for utilities than any other group.

[Insert Table 3 about here]

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Samples were also grouped by the type of the issue: if the primary seasoned equity issue is associated with a secondary issue then those are identified as 'combined' issue and if not then those are identified as 'primary' issue. It is argued in the literature that secondary offerings are associated with negative market reaction (Johnson, Serrano, and Thompson (1996)), therefore, it is expected that combined issue events should result in more negative reaction than the primary issue. Out of the total sample events, 970 of the events were Primary issues and 383 events were Combined issues (Table 3). Combined issue events for Financial and Utilities were relatively fewer then Industrial firms. The total number of Primary issue events for the Industrial group is 589 events and the same for the bank and utilities are 202 and 179 events respectively. The number of Primary issue event is more than the combined issue events in all sub-groups.

Table 4 contains the descriptive statistics of the overall sample events showing the mean and the median. Other variables included in the tables are: properties of issue events such as, issue price, issue size adjusted by

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the market value of the assets, leverage of the issuing firm, firms' growth measures such are Tobin's Q, 1-year and 3-year growth in return on sales, and the firms measures of performances, like, return on sales (ROS), return on Assets (ROA). Other variable includes in the table are market value of assets, and cash flow to total assets.

[Insert Table 4 about here]

In order to analyze the impact of diversification on the market value of seasoned equity offerings firm additional data have been collected from the Compustat PCPLUS for 1996[30]. From this source two sets of data is gathered to identify the level of diversification of the sample firms. Collected data are: four-digit SIC (Standard Industry Classification) code and the reported sales by the each four-digit SIC code. It is important here to mention that Compustat only carry segment data for past seven years. Therefore, analysis in this regard is restricted between 1989 and 1994. Due to this limitation 794 sample events

[30] Author gratefully thanks the business library of College of William and Mary for their generosity in letting him use their data source.

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were lost. Additional 9 sample events were also lost due to non availability of segment information for the last year[31] of the seasoned equity issuing firms. Thus, the final number of sample events for analyzing the impact of diversification drops to 550 sample events[32].

Panel A of Table 5 shows the distribution of segment sample events as they are grouped by the multiplicity of the issue (i.e., single and multiple) and by the type of the issue(i.e., Primary and Combined) in different exchanges. Panel B contains the same information for different industry categories. Out of total 550 sample events, 382 events were Primary issues, and 168 events were Combined issues, and 305 sample events were Single events, and 245 were Multiple events. The total number of Primary issue events for Industrial group is 244 events and the total number of single issue events is 227 events. The number of single events surpass multiple events in all categories, similarly,

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[31] The term 'last year' refers to that financial year which is immediately preceding the event date, and where the issue event is NOT included in the financial data.

[32] op. cit. Table 1.

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the number of Primary issue events is more than the Combined issue events in all sub-groups[33].

[Insert Table 5 about here]

Table 6 reported below contains the descriptive statistics of the primary variables for the last year used in the segment sample events.

[Insert Table 6 about here]

B. METHODOLOGY

a) Event Study:

Figure 1 represent how the daily returns are used in calculating the estimated of normal returns and excess return for each sample event. The event day is the day 0 in the event time. The estimation period is t = -162 to -36

[33] This is due to the sample selection process used in this study, where similar issue events within one year of event day is dropped.

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relative to the event date(day 0) is used to calculate (estimated) the normal return of the event window, which is a 31 day period (-15 through +15 relative to event day).

[Insert Figure 1 about here]

The market model is used to estimate normal or expected returns of the common stocks of the sample events. In this ordinary least squares model, returns on a given security are regressed against the concurrent returns of the market. The Center for Research on Security Prices (CRSP) equally weighted index is used as a proxy for the market Portfolio.

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt}$$

Where,

t = day measured relative to the event,

R_{jt} = return on security j on day t,

R_{mt} = daily equally-weighted index for all common stocks on NYSE & AMEX and NASDAQ firms on the CRSP tape on the event date t (a proxy for the market portfolio of the risky assets)

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α_j = estimated period intercept of firm j

β_j = Ordinary Least Square (OLS) estimates[34] of firm j's market model parameters.

ε_{jt} = the error term of security j on the sample event day t

The abnormal returns for the sample event is the difference between the actual returns on its common stock and the contemporaneous expected return generated by the market model. The abnormal returns(AR) for each sample event j on day t is obtained as follows:

$$AR_{jt} = R_{jt} - (\alpha_j - \beta_j R_{mt})$$

Where

t = day measured relative to the event,

AR_{jt} = excess return to security j for day t,

R_{jt} = return on security j during day t,

---

[34] Eades, Hess and Kim (1984) has maintain that the above methodology may create a potential for bias of the Ordinary Least Square(OLS) estimate β_j, due to nonsynchronous trading and infrequent trading in the estimation period. In order to correct such biases Scholes and William (1977) suggested methodology is adopted to calculate the OLS estimate β_j.

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R_{mt} = daily equally-weighted index for all common stocks on NYSE & AMEX and NASDAQ firms on the CRSP tape on the event date t (a proxy for the market portfolio of the risky assets)

α_j = estimated intercept of firm j

β_j = OLS estimates of firm j's market model parameters.

Daily abnormal or excess returns are calculated for each sample event in the study over the event window. For a sample of N sample event, the daily average abnormal return for each day t is estimated as

$$AR_t = \sum_{j=1}^{N} AR_{jt}/N$$

The expected value of AR_{jt} is zero by definition.

Analysis of statistical significance of the abnormal returns calculated above requires the standardization of abnormal return to reflect statistical errors in the determination of expected returns. To determine whether the

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average daily abnormal return is statistically significantly different from zero, the average standardized abnormal return($ASAR_t$) is calculated as

$$ASAR_t = 1/N \sum_{j=1}^{N} AR_{jt} / S_{jt}$$

Where,

$$S_{jt} = \left[S_j^2 \left(1 + \frac{1}{T} + \frac{(R_{mt} - R_m)^2}{\sum_{t=1}^{T} (R_{mt} - R_m)^2} \right) \right]^{1/2}$$

and

S_{jt} = Standard error of the forecast for security j in period t in the event period;

S_j^2 = The residual variance for security j from the market model regression;

N = The number of observations in the estimation period;

R_m = The average return of market portfolio for the estimation period

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R_{mt} = The returns on the market portfolio for the day t

R_{mi} = The market return for period j within the estimation period;

T = Number of periods employed in the regression equation for parameter estimation (126 days).

T = Number of periods in the event window/period (31 days).

I = Sub-script for estimation period.

J = Sub-script for the event window/period.

Assuming the normality and the independence of the distribution of the calculated abnormal returns the t-statistics of the estimated parameters were calculated for each days as:

$$t = \sqrt{N(ASAR_t)}$$

The cumulative abnormal returns(CAR) for each security j, CAR_j, is calculated by summing average abnormal returns over the event period as follows:

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$$CAR_{j,K,L} = \sum_{t=K}^{L} AR_{jt}$$

Where the $CAR_{j,K,L}$ is for the period from t = day K until t = day L.

The cumulative average abnormal returns(CAAR) over the event time period from day K to day L are calculated as

$$CAAR_{K,L} = \frac{1}{N}\sum_{j=1}^{N} CAR_{j,K,L}$$

Then average of the above standardized cumulative abnormal return over the interval K to L are obtained as follows:

$$ASCAR_{K,L} = \sum_{K}^{L} \frac{ASAR_{K,L}}{\sqrt{K-L+1}}$$

Finally, the t-statistics for the average standardized cumulative abnormal return were calculated using the following formula:

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$$t(ASCAR_{K,L}) = \sqrt{N(ASCAR_{K,L})}$$

For the purpose of this analysis the only Cumulative abnormal returns were calculated for three days around event day by summing the abnormal returns of event day minus one day, event day, and event day plus one day, and is called $CAR_{-1,+1}$. It is observed in the preliminary examination of abnormal returns of the sample events that abnormal returns around the three days of event day is consistently significant in all the sub-groups of the sample[35].

b) Cross Sectional Regression Analysis:

A cross sectional analysis was employed in the study to identify the relationship between the identified variable with the dependent variable. The dependent variables are $CAR_{0,0}$, and $CAR_{-1,+1}$ and the main independent variables are: Tobin's Q as a measures of growth opportunities, leverage ratio, market value of assets, cashflow to total assets,

[35] 5-days cumulative abnormal returns are also calculated to get some additional insight of the results.

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size of the issue adjusted by the market value of the assets, and dummies for the sub-group of sample. In the segment sample additional independent variable Herfindahl index and dummies for the focus level (High-focused vs. Low focused) and focus activity (Increase focus vs. Decreased focus) are used.

i) Tobin's Q - Calculation & Its Use

In order to perform the cross sectional analysis, this study requires the understanding of firms' investment opportunities and its relation to Tobin's Q. Tobin's Q has been defined as the ratio of the market value of a firm to the replacement costs of its assets. James Tobin (1969) introduced this ratio in order to examine the causal relationship between Tobin's Q and investment. He argues that if, at the margin, Tobin's Q exceeded unity, firms would have incentive to invest, since the value of their new capital investment would exceed its cost. It is clear that if all such investment opportunities were exploited, the marginal value of Tobin's Q should tend toward unity.

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In the finance literature Tobin's Q has been used to represent a number of diverse corporate phenomena, such as, cross-sectional differences in investment opportunities and diversification decisions (Malkiel, Von Furstenberg, and Watson (1979)); the relationship between managerial equity ownership and firm value (McConnel and Servaes,(1990 and 1995)); and Morck, Shleifer, and Vishny,(1988)); the relationship between managerial performance and tender offer gains (Lang, Stulz, and Walking(1989)); investment opportunities and tender offer responses (Lang, Stulz, and Walking, (1989)); and financing, dividend, and Compensation policies (Smith and Watts,(1992)).

In this paper Tobin's Q is using to distinguish between firms that have positive Net Present Value investment opportunities and those that who do not. High Tobin's Q firms are those who possess positive investment project at the time making seasoned equity offering and low Tobin's Q firms are those who do not possess such opportunities.

The calculation of Tobin's Q as suggested by Tobin's is practically impossible for the samples used in this studies, due to non availability of replacement cost estimated for the sample period. The procedure used by Lindenberg and

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Ross (1981), hereinafter, L-R to estimate Tobin's Q is very complicated in terms of computational efforts and data availability. Chung and Pruitt (1994) developed a simple formula to approximate L-R's estimate of Tobin's Q.

$$\text{Approximate Tobin's Q} = (\text{MVA} + \text{PS} + \text{DEBT})/\text{TA}$$

where

MVA[36] = Product of a firm's share price and the number of common stock outstanding

PS= = Liquidating value of firm's outstanding preferred stock[37]

DEBT[38] = Short-term liabilities net of short term assets plus the book value of the firm's long-term debt.

TA[39] = Book value of the total assets of the firm.

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[36] Product of Compustat date item #25 and data Item #199.

[37] Compustat Data Item #10

[38] Sum of Compustat data Item #5 and #9 *minus* data Item #4.

[39] Compustat Data Item #6.

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The main advantage of Chung and Pruitt's method is that (a) all data needed to calculate Tobin's Q is readily available in the Compustat database, and (b) this method is capable of explaining 96.9% of the variability of the L-R's method of approximating Tobin's Q. For the purpose of this paper thus, Chung and Pruitt's approximation is used.

Firm's leverage ratio is defined as the book value of current liability plus long-term debt divided by the sum of the book value of current and long-term debt, market value of common stock, and liquidating value of preferred stock (Pilotte, 1992). Appendix B contains the details of the calculation of different variables to be used in the study.

Calculated Tobin's Q is then adjusted by using the industry and exchange controlled median[40] Tobin's Q in order to group the sample by Q ratio. The same step is taken for grouping the samples by the leverage ratio[41],[42]. Event year

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[40] In calculating industry and exchange controlled median we used all available companies in the Compustat data base for 1996.

[41] This papers' unique industry and exchange median is motivated by the fact that finance researchers have already recognized the structural and size differences among the firms listed in the New York Stock Exchange, the American Stock Exchange and the NASDAQ market system (Ambarish, John, and William, 1987).

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is defined as the financial year within which firm made the equity issue announcement. For the purpose of the study the 'last year'[43] (i.e., the year before the event year) is the relevant year. Because, this is the year where the issue event's impacts on accounting numbers are not incorporated. In other words, the grouping of the samples are made based on last year's Tobin's Q, and /or leverage ratio.

ii) Herfindahl Index - Calculation & Its Use

Net sales[44] based Herfindahl index[45] (HI) is used in this study to measure the level of focus /diversification of

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[42] Industry and Exchange median adjusted Tobin's Q, book-to-market or leverage ratio is calculated by subtracting the industry and exchange adjusted median value of the respective variable from the actual value for the firm. e.g., adjusted Tobin's Q of firm X is calculated as Tobin's Q of X for year t minus industry and exchange adjusted median Tobin's Q for the year t.

[43] op. cit. Footnote #32.

[44] This item represents gross sales(the amount of actual billings to customers for regular sales completed during the period) reduced by cash discounts, trade discounts, and returned sales and allowances for which credit is given to customers, for each industry segment. For more details please refer to Compustat user's manual.

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the issuing firms. Net sales are reported in Compustat (PCPLUS) for each segment only if the segment sale is at least 10% of the total sales. A net sales based Herfindahl index reflects the degree to which revenues are concentrated in just a few of a company's business segment, and calculated across n business segments as the sum of squares of each segment i's sales, S_i, as a proportion of total sales:

$$H_t = \Sigma^n_{i=1}(S_{it} / \Sigma^n_{i=1} S_{it})^2$$

Where H_t takes values between zero and one. The closer H_t is to one, the more concentrated are the firm's sales within a few segments, and hence the more focused its operations. High focused firms are those which have H_t in the event year greater than the industry adjusted median Herfindahl index, and rest are called low focused or diversified firms.

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[45] Compustat only reports sales based on four-digit SIC, therefore, our calculation of Herfindahl index is a four-digit SIC code classification based measure.

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Table 7 (panel A) shows the distribution of segment samples by exchange listing and industry classification and by the level of diversification - high-focused and low-focused. Panel B contains the grouping the segment samples by the diversification/focus activity of the sample events over the last three years. If the firms has increased focus in the past two year over the preceding year then those are identified as focus-increased firms, on the other hand, if the firms has decreased the focus successively over the last two year then those are identified as focus-decreased firms. Sample does not fall into this categories are dropped from the sample to facilitate a better comparison between the market reaction to seasoned equity offering by the group in this sub-section of the study.

[Insert Table 7 about here]

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V. EMPIRICAL RESULTS

A: Analysis of Abnormal Returns

Table 8 contains the average abnormal returns on the event date ($CAR_{0,0}$), cumulative abnormal return for 3-days around the event-date ($CAR_{-1,1}$), and cumulative abnormal returns for 5-days around the event date ($CAR_{-2,2}$) along with their respective t-statistics. In the overall sample it is found that the average abnormal return for the event day is -0.8416% (t=-11.8163). The cumulative abnormal returns for the 3-days around the event day(-1 thorough +1) is -2.1626% (t=-1.93871) and for the 5-days around the event day(-2 thorough +2) is 2.4328% (-1.70849). Previous empirical work has reported that the average two-day abnormal return for seasoned equity offerings around the event date is about -3.1% for Industrial firms[46]. Event day and cumulative abnormal returns observed in this study are lower than what

[46] Source: Asquith and Mullins (1986), Kolodny and Suhler (1985), Masulis and Korwar (1986), Mikkelson and Parch (1986), Schipper and Smith (1986).

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is reported in previous empirical works. The most plausible reason is that the sample period covered in this paper is different from other empirical works. Additionally, this paper's sample filtration to isolate the impacts of individual seasoned equity offerings from other seasoned equity offering as well other related offerings may have caused the lower event day abnormal return and 3-days cumulative abnormal returns around the event date[47] as compared to what is found in previous work.

[Insert Table 8 about here]

The reported t-statistics on table 8 are highly significant for all categories. Table 8 also reports the percentage of positive returns on the event date. These numbers are relatively high when compared with those reported occasionally by previous researchers in this area. The percentage of positive response on the event day for the

[47] To the best of the authors knowledge no other empirical has done this much extensive filtration to select the individual seasoned equity offerings

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overall sample is 34.885%[48]. The same percentages from previous empirical works ranged between 19% and 27% for industrial firms. The apparent reason is that due to more stringent filtration, some higher negative abnormal return producing sample events may have been dropped out from this study.

The table also contains the breakdown of the abnormal returns by the type of industry. The event-day and 3-days cumulative abnormal returns for the industrial firms are -0.97866% (t=-9.6227). and -2.49151% (t=-14.4787434) respectively[49].

When the sample is grouped by the exchange listing of the events it is found that samples listed in the American Stock Exchange(AMEX) and NASDAQ market system have more negative abnormal returns at the announcement of seasoned equity offerings when compared with the issues listed in the

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[48] The percentage for Banks is 41.949%, for Industrial firms the percentage is 33.153%, and for Utilities the percentage is 34.555%.

[49] For the Banks the event-day and 3-days cumulative abnormal returns are -0.61584%(-4.223236) and -1.74887% (t=-7.0944853), and for the Utilities are -0.45605%(t=-3.87064) and -1.0793% (t=-5.33169668) respectively. The findings of relatively lower abnormal returns for Banks and Utilities are consistent with the empirical findings of Polonchek, Slovin and Sushka (1989)

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New York Stock Exchange(NYSE). This finding does not support the argument placed by Ambarish, John, and William(1988), that issues listed in the AMEX and in NYSE are mostly mature firms and should experience more value loss than the firms listed in the NASDAQ market system as firms listed in the later are mostly rapidly growing firms. The finding of a greater negative market reaction for the firms listed in the NASDAQ system indicates that there are other factors beyond growth opportunities which are contributing toward the market reaction to such offerings[50].

It is expected in this paper that the multiple issuers should experience less negative effects as the market has better information about the issuers. Investors in the multiple issue events are less uncertainties about the company and its activities as compared to the investor in single/ first time issues. Analysis in this paper shows that the mean abnormal return difference between multiple issuers and single issuers is not statistically significant[51]. But the magnitudes of the results are in the

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[50] A similar conclusion is drawn by Denis(1994).

[51] Important to report that individual groups event day abnormal returns are statistically significant at all conventional level.

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same direction of earlier argument, i.e., the market favors experienced firms but not at any significant level at least for the overall sample. These findings remain consistent among industrial classification as well as categories of exchange listing.

T-test results (not reported in the above table) also indicate that if the issue event is associated with a secondary issue on the event date (i.e., combined issues), then the issue causes significantly greater value loss to the firm than if the issue had been made independently (i.e., primary issues). When a primary issue is associated with a secondary issue that implies that the block holders of the stock are also selling their stocks while the company itself is trying to sell more stocks in the market. Negative pressures are coming from two forces: (1) more stocks are available in market - an over-supply of stocks; and (2) blockholders(who are generally believed to have inside information) intentions to sell their stock could bear a negative news about the issue as well as about the firm. When the results were examined by the industry classification and exchange listing of the issue, it is found that the mean abnormal return difference between the

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primary and combined issue is statistically significant for the industrial samples and also for the firms listed in the NASDAQ market system. Thus the conclusion is drawn that in determining a NASDAQ listed industrial firm's market reaction to seasoned equity offering, the type of the issue is an important determinant. The market reaction for a combined issue is significantly more negative than that of the primary issue.

a) Abnormal Return & the Impacts of Leverage

In order to test hypothesis one (H1) and hypothesis two (H2), developed earlier in this paper, sample events were classified by the level of issuing firms existing leverage level (Table 9). If the issuing firms leverage on the last year (i.e., the year before the issue event took place) is greater than the industry and exchange adjusted median (calculated using all the available firms in the Compustat database) than the firms were considered to be high-levered firms. The remaining firms are classified low-levered firms. Out of 1353 sample events, 687 sample were identified as

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high-levered issue events and the rest (666 event) as low-levered events. The event-day abnormal returns for the two group were -0.779306% and -0.901994% for high-levered firms and low-levered firms respectively. The mean abnormal return differences between the two group is not statistically significant. The mean leverage level (not reported in the table) for the two groups was 0.137298 for the low-levered group and 0.397949 for the high-levered group, the differences between the mean of leverage ratio is statistically significant. These results fail to support hypothesis one(H1), i.e., that high-levered firms lose more value at the announcement of a seasoned equity offering. On the other hand, the support for hypothesis two(H2) is not statistically significant. This implies that the results do not show that the market's reaction to seasoned equity offerings of high-levered firm is better than the low-levered firm.

[Insert Table 9 about here]

The sample events are then examined by the industry classification and also by the exchange listing of the issue

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event. There are no significant differences between low-levered firms and high-levered firms among any of the sub-groupings by industry classification or by exchange listing. Even when the sample events were grouped by the type of the issue and by the multiplicity of the issue, results also do not reveal any significant differences. Although the mean abnormal return differences are not statistically significant, the results in the table 9 reveal that in general high-levered firms are performing better than low-levered firms, thus shows sign for favoring the growth impact arguments of leverage as outline in hypothesis two (H2)[52,53].

For the Industrial sample events it is observed that exchange listing is not a factor that contributes toward the differences in abnormal return between the high-levered and low-levered firms, neither does the types of the issue or

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[52] Out of the ten(10) different groupings of sample events seven(7) groups supports in favor of hypothesis two, i.e., growth argument and the rest 3(three) group supports hypothesis one, i.e., information asymmetry argument on the event-day abnormal return.

[53] Therefore, it is warranted that the growth impact of leverage need to be addressed along with the growth opportunity argument to understand the impacts of leverage and Tobin's Q in market's reaction to seasoned equity offerings

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the multiplicity of the issue (Table 10). Also observed in table 10 that in the overall sample, events listed in NYSE and AMEX the dominance of information asymmetry impact of leverage is visible, i.e., high-levered firms lose more value at the issue announcement due to the high marginal increase in information asymmetry (H1). Whereas, issues listed in NASDAQ shows less negative abnormal returns for high-levered firms, which supports the growth impact of leverage hypothesis (H2). Thus the results supports the view of Ambarish, John, and William (1987)'s that the announcement effect for the firms listed in the NASDAQ market, which are mostly growing firms, should be a function of growth.[54]. Results show support for both hypotheses (H1 and H2) for different sub-categories of sample event. Whether the information asymmetry impact of leverage or the growth impact of leverage is dominant depends on the issue characteristics of the event.

[Insert Table 10 about here]

[54] Result remains consistent when 3-days cumulative abnormal returns were used in the analysis.

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Results in Table 10 indicate that firms listed on the NYSE carried significantly different abnormal returns with the announcement of seasoned equity offerings between low-levered firms and high-levered firms when sample are further classified between the single issues and multiple issues. It affirms the argument that for multiple issuers, the market is already aware of the firms growth and growth related information through past experience, so the uncertainty about the issue event become the dominating force in controlling the announcement effect. Thus, results support the information asymmetry impact of leverage hypothesis (H1). For the single issuers the story is different, the market does not know much about the firm's growth related opportunities of the firms as well as that of the event itself. Therefore, the growth impact of leverage becomes the dominating force, and as observed in this study, high-levered firm's market reactions is less than the low-levered firm for these samples, and hence supports the hypothesis (H2). It is important to note that in both cases the abnormal return differences between high-levered and low-levered firms are statistically significant. Thus, the findings supports both hypotheses (H1 and H2) and also

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recognizes the fact that the market's reaction to seasoned equity offerings depends upon the nature of the issue.

b) Abnormal Returns & Growth Opportunities

Like most of the previous empirical works, growth in this paper is measured by calculating Tobin's Q. Although this study uses an abridged version of original Tobin's Q due to lack of data, the descriptive statistics of Tobin's Q shows that the calculated Tobin's Q used in this study is very similar to what has been used in other empirical works. The descriptive statistics of the Tobin's is listed in table 11. It is observed that mean and median Tobin's Q for the overall sample and for all of the categories are very high. This implies that issuing firms are firms with ample growth opportunities. To isolate the relatively high-growth opportunity firms from the relatively low-growth opportunity firms this paper used a more restrictive growth classification. In this paper high growth opportunity firms are those which have Tobin's Q greater than one, as well as a Tobin's Q greater than the industry and exchange-adjusted

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median Tobin's Q. This classification produces a mean Tobin's Q for low growth opportunity firms of 0.590849, and that for the high growth opportunity firms of 2.292758.

[Insert Table 11 about here]

Theoretical arguments suggest that a high-growth firm's growth opportunities minimize the value loss associated with the announcement of seasoned equity offerings. However, empirical studies on seasoned equity offerings shows little evidence that high growth firms benefit from seasoned equity offerings. Table 12 contains the results of event day abnormal returns of the sample events grouped by high-growth opportunity firms and low-growth opportunity firms. Results indicate that there are significant differences between high-growth and low-growth firms in event-day and 3-days cumulative abnormal returns for the overall sample. But most importantly is the result that high-growth opportunity firms' market reaction to seasoned equity offerings is significantly more negative than that for the low-growth opportunity firms. The results are consistent even when the samples are regrouped by the industry, or by the exchange

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listing of the events, or by the type of the issue, or by the multiplicity of the issue. Thus, the overall results supports the marginal growth impact argument (H3) developed earlier in this paper.

[Insert Table 12 about here]

Table 12 also shows that a higher level of significance in mean difference between abnormal returns between for different growth opportunity levels exists in the sample group of industrial firms, firms listed in the NASDAQ market, in the combined samples and in the sample consists of single issuers. Other sample groups also show a similar pattern i.e., high-growth opportunity firms losing more value than the low-growth opportunity firms, but the results are not statistically significant. Results are also consistent in 3-days and 5-days cumulative abnormal return except for the NYSE listed samples in 3-days cumulative abnormal return. These findings are in sharp contrast to the popular belief that growth opportunities plays a positive role in determining the announcement effect of

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seasoned equity offerings, but overwhelmingly supports the validity of hypothesis H3.

In order to explain the inconsistency of this paper's findings with the previous empirical work it can be argued that in a seasoned equity offering it may not be the growth opportunities that is controlling the announcement effects[55]. It is argued in this paper that other factors imbedded in the growth opportunity proxy, i.e., the Tobin's Q, may be causing the negative affect. It is likely that a low-growth opportunity firm's decision to issue carries a stronger positive marginal effect than that of the high-growth opportunity firms. As a result low-Tobin's Q (low-growth opportunity) firms have less negative impact than the high-Tobin's Q (high-growth opportunity) firms. Thus, the issue announcement, which itself is a good news, creates a marginal dominance of good information in favor of low-Tobin's Q firms.

The results are consistent and more interesting when the industrial sample is broken into different categories

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[55] Empirical evidences to date fails to show a significant positive association between Tobin's Q and market reaction to seasoned equity offerings in a consistent way.

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based on exchange listing, type of the issue and the multiplicity of the issue. As reported in table 13, out of 926 industrial sample events 501 sample events belong to the low-growth opportunity group and rest of the 425 sample events are in the high-growth opportunity group. The abnormal return differences between the two groups is statistically significant at the less than 5% level. Low-growth opportunity firms experiences less value loss than high-growth opportunity firms at the announcement of seasoned equity offerings. Further break down of the sample by the exchange listing, by the type of the issue and by the multiplicity of the issue, confirms the overall findings. This finding is statistically significant at less than one (1) percent level for the NASDAQ listed firms and marginal significance (less than 10%) is observed for AMEX listed firms.

[Insert Table 13 about here]

In the industrial sample, when the sample is grouped by the type of the issue, only combined issues show significant abnormal return differences. No significant difference is

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observed in event day abnormal return between multiple issuers and single issuers (results are not reported in the table). But the direction of abnormal return differences is consistent with that of the overall sample. When the abnormal returns of sample events are cross examined by considering the exchange listing in conjunction with type of issue and the multiplicity of the issue, the results remain consistent except for the multiple issuer samples from the NYSE[56]. Thus, the overall result strongly support the negative effects of Tobin's Q, a support for H3. This suggests that the marginal impact of financing decision on high growth/ low growth firm are a determining factor in assessing the market reaction to seasoned equity offerings.

To verify the consistency of the results observed above, the sample is further grouped by the 75 percentile and 25 percentile of industry adjusted median Tobin's Q and then t-tests are performed on the differences in mean abnormal return of the two groups. It is found that the

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[56] In this group it is found that the direction of difference is opposite. This paper believes that previous empirical work's observation of marginal insignificant positive association between Tobin's Q and event day abnormal return is the result of the influence of these sample group in the total sample used in those studies.

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results are consistent with results of the overall sample., i.e., the high growth firms performing poorly compared to low growth firms (results are not reported in the table), and the results are statistically significant.

The above finding contradicts the arguments of the existing literature and the findings of previous empirical works. It has been argued in the literature that high Tobin's Q firms should experience less negative impacts at the announcement of seasoned equity issue announcements. But the findings of previous empirical works in this area are inconclusive. The statistically significant difference between the growth level observed in this paper is due to the stricter grouping criteria for distinguishing between high-growth firms and low-growth firms. Such an action is warranted due to the finding that on average all seasoned equity issuing firms carry a high level of Tobin's Q. The negative association between the growth opportunity levels (Tobin's Q and abnormal return affirms the fact that market reacts to the marginal growth impact of issue announcement. That is, the lower the level of Tobin's Q of firms more is the marginal positive information

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c) Abnormal Returns and the Combined Effect of Leverage and Growth Opportunities.

This section is intended to test the validity of hypothesis four (H4) and hypothesis five (H5) developed in Issues and Hypotheses section of this paper. It is observed in this study that both the information asymmetry (negative) impact (H1) and growth (positive) impact (H2) of the leverage effect is present in the market reaction to seasoned offering depending on the issue characteristics. Additionally, it is also observed in this paper that the growth opportunity measure have a significant negative association with market reaction to issue announcements (H3). This is because the market reacts not directly to the growth opportunities but rather to the marginal growth impact of such issue announcements. As most issues have high Tobin's Q ratio the marginal impact is greater for the firms with relatively low Tobin's Q ratio.

Table 14 and table 15 contain the examination of event-day abnormal return and 3-day cumulative abnormal return of seasoned equity offerings by the growth opportunity level of

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the samples and by the existing leverage level of the sample to understand the combined effects of the two variables on the market reaction to such announcements. For the total sample, event day abnormal returns are more negative for high-growth opportunity firms than low-growth opportunity firms across the board, but abnormal return differences are significant only for the firms within high-leverage group of samples. Thus the findings are consistent with the previous results.

[Insert Table 14 about here]

[Insert Table 15 about here]

When the samples are regrouped by industry, by the exchange listing of the issue, by the type of the issue - primary and combined, and by the multiplicity of the issue - single and multiple, significant differences in the event day abnormal return (table 14) are present between the high-growth opportunity and low-growth opportunity firm for industrial samples, for samples listed in the NASDAQ, for combined issues and for single issues, when the existing

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leverage level of the firms are high (high-levered firm). Table 14 also indicates that for the high-growth opportunity samples of industrial firms, the event day abnormal return difference between the high-levered firm and low-levered firm is marginally significant. Similar marginal significant differences between high-levered firms and low-levered firms is also found in the low growth opportunity samples of Utilities. Among all 20 subgroups, only the low-levered sample listed in the NYSE produces an insignificant differences between the high-growth opportunity and low-growth opportunity firms in favor of high-growth opportunity firms. Table 15 also indicates that out of ten (10) categories of sample events 6 (six) of the least value loss event occurs in low-levered group sample, and the same number for the low-growth opportunity firms is 7 (seven). On the other hand, 7 (seven) out of ten (10) maximum value decreasing events took place among the high-levered group, and among 8 (eight) amongst the high-growth opportunity group. Thus, the findings of this paper supports the theoretical prediction of the hypotheses (H4 and H5)

Table 16 reports the results of the cross examination of industrial samples. For the total sample there is

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significant support for the information asymmetry impact of leverage - a support for hypothesis one (H1) among the high growth opportunity firms. For the low-growth opportunity firms there is an insignificant support in favor of growth impact of leverage - a support for hypothesis two (H2). When the sample is broken down by different categories, the findings remain consistent, although not statistically significant. The only exceptions are found among low-growth opportunity AMEX firms and among multiple issuer firms. In these cases, the growth impact of leverage remains dominant.

[Insert Table 16 about here]

It is also observed in table 16 that event day abnormal return difference between the high-growth opportunity firms and low-growth opportunity firms is in favor of low-growth opportunity firms, that is, the low-growth opportunity firms are losing less value at the announcement of seasoned equity offerings. The only exceptions to this finding is observed in the low-levered categories among the sample from NYSE and primary issuers. In both cases the results, are not statistically significant. Most of the significant results

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between the performance of high-growth opportunity firms and low-growth opportunity firms are observed in the categories of NASDAQ listed firms, in combined issues, and in the single issuers. For the AMEX listed firms, the significant difference between the impacts of issue announcements of high-growth opportunity firms and low-growth opportunity firms are observed among the low-levered group. Out of seven (7) most value decreasing incidences, all seven (7) took place amongst the high-growth opportunity group and amongst the high-levered group. At the same time, six (6) out of the seven (7) least value decreasing events took place in the low-growth opportunity group.

By re-examining table 16, where the industrial sample of event-day abnormal returns are broken down by the leverage level and the level of growth opportunity, samples from the NASDAQ market system, from combined issues and from single issues sub-group have the least value loss in the low-growth opportunity high-levered group, and more importantly, the return difference among the growth opportunity levels is statistically significant in favor of the low-growth opportunity firms in the high-levered group. By recalling the growth impact of leverage (H2), and the

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findings of this paper in section (a) that NASDAQ listed firms, and combined issues and issues by the single issuers supports the hypothesis of growth impact of leverage (H2), it can be concluded that the hypothesis H5 is strongly supported in this paper. On the other hand, strong support for hypothesis H4 is also observed in the industrial sample. All of the maximum value loss events occur in the high-levered high-growth opportunity samples. These results are consistent with the overall sample results reported earlier. In order to investigate, further cross sectional regressions on event day abnormal returns are performed in the following section.

d) Cross Sectional Regression Analysis:

The event-day abnormal return is the dependent variable in the regression analysis. The independent variables are the leverage ratio (LEVRG), Tobin's Q (T-Q) ratio, size of the issue adjusted by the market value of assets (ISUSIZE), Cashflow to total assets (CFTA), and the log of the market value of assets (L(MVA)). The dummy TYPE takes a value of 1

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(one) if the issue is a combined issue, else (primary issues) takes a value of 0 (zero). The dummy variable MLTPL takes a value of 1 (one) if the issue is a multiple issue, otherwise it takes the value 0 (zero). If the issue is listed in the NASDAQ market system, then dummy XNG1 takes a value of 1 (one), otherwise it takes a value of 0 (zero), and if the issue is listed in NYSE then the dummy variable XNG2 takes value 1 (one), otherwise 0 (zero).

Table 17 contains the results of the cross sectional regression analysis. The results for the overall sample is produced in panel A, and in panel B only the industrial samples are used. The regression result for the overall sample shows that Tobin's Q as an independent variable has a consistently negative coefficient, whereas, leverage does not have any significant coefficients. But the sign for both variables is consistently negative, except for the model where leverage is used independently. This affirms previous evidence that both leverage and Tobin's Q have a negative association with issue announcements. When the relative issue size variable (ISUSIZE) is introduced into the model, the model's explanatory power - adjusted R-squared(ADJ R-SQ) increases substantially (model-4), and the

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issue size variable has a highly statistically significant coefficient. This is another indication that issue characteristics have significant effect on the market's reaction to seasoned equity offerings. Other variables introduction in the model do not improve the explanatory power nor any of the estimated coefficients are significant. The sign of the estimated coefficient for the dummy variables for the type of the issue and for the multiplicity of issue are in the direction expected in this paper. That is, combined issues add to the negative magnitude of the market reaction, whereas, multiplicity adds to the positive magnitude of the reaction.

In panel B, where industrial samples are considered, the results are quite different. Both leverage ratio and Tobin's Q ratio have negative significant coefficients throughout the models. The other significant independent variable is the relative issue size, but the level of significance for this variable drops successively as other variables and dummies are introduced into the model, specially with the introduction of the dummies for type of the issue and the multiplicity of the issue. These findings confirm the arguments developed earlier that issue

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characteristics plays an important role in determining the magnitude of market reaction to seasoned equity offerings. The insignificant coefficients for cashflow to total assets (CFTA) and log of market value of assets (L(MVA)) implies that market already knows that these firms are high value firms and the agency problem of free cashflow is not present. This argument is consistent with the previous findings that samples' Tobin's Qs are very high.

[Insert Table 17 about here]

d) Summary

The examination of the market reaction to seasoned equity offering from the perspective of growth and leverage is analyzed in the previous section. In the theoretical section of this paper, several hypothesizes were developed to explain the possible impacts of growth opportunities and impacts of the leverage level of issuing firms. Empirical research on this area argues that if the issuing firm possesses growth opportunities as measured by Tobin's Q,

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then the issuing firm should experience a positive, or at least less negative, market reaction to seasoned equity offerings. For the traditional growth opportunity theory, there is practically no support in this study, except for a marginal support in the samples from NYSE[57]. Previous empirical research has documented that there are some marginal support from offerings for very high growth firms. The evidence in this paper shows that high-growth firms consistently perform poorly at the announcement of seasoned equity offerings and thus support the alternative view of Tobin's Q as presented in this paper. This paper, thus, argues that seasoned equity issuing firms are in general high-growth opportunity firms (as measured by Tobin's Q ratio), therefore, the marginal impact of issue announcement is more positive for the low-growth opportunity firms than the high-growth opportunity firms.

The impacts of leverage on such issue announcement has never been addressed directly. The theoretical argument is that a firms high leverage level can prevent the firm from capitalizing all investment projects. The problem gets more

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[57] The only better performance by high Tobin's Q firm is observed in the sample from NYSE and only when 3-days cumulative abnormal return is used.

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serious with the increase of leverage. Additionally, high levered firms suffer from high bankruptcy cost. Both of these together should result in an under-valuation of firms value, and an undervalued firm should not issue equity because that would cause more value loss to the firm. Thus a high-levered firm's equity issuance should produce a negative market reaction.

This paper examines the impact of leverage from a totally different perspective and argues for both information asymmetry and growth impact of leverage and looks into which of the two argument plays the dominant role in determining the market reaction to seasoned equity offerings. Although the results are not statistically significant when the impact of leverage is examined independently, it is observed that the support for a particular hypothesis (H1 or H2) depends on the issue characteristics of the sample events. The sample from industries listed in NYSE and in AMEX issuing only primary issues by the multiple issuers favors hypothesis one (H1), i.e., the information asymmetry impact of leverage is dominant, whereas, other sample groups support the growth impact of leverage (H2). But when the results are examined

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in conjunction with the growth opportunity measure (Tobin's Q) the consistency of the result affirms that leverage has both negative and positive effect on the announcement effect of seasoned equity offerings, and the dominance of one over another depends on other factors, such as, issue and issuer related characteristics.

As the effects growth opportunities and leverage level is examined simultaneously under hypothesis H4 and hypothesis H5 developed in the paper, it is found that high-growth high-levered firms are the worst performer and the firms with high-leverage and low-growth opportunity firms have the least value loss at the announcement of seasoned equity offerings. Thus, the results are consistent with the predictions of hypothesis H4 and hypothesis H5. The consistency of the result remains present in both the overall sample as well as industrial sample. The finding of the validity of both hypotheses (H4 and H5) also supports the view expressed in this paper that issue characteristics is also an important element in the market's reaction to seasoned equity issues market reaction. Cross sectional regression results also confirm the above findings.

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B: *Diversification & Seasoned Equity Offerings*

a) Analysis of Abnormal Returns:

Table 18 presented below shows the event-day abnormal return, 3-day cumulative abnormal return, and 5-day cumulative abnormal return of the sample selected for this section of study. There are 550 sample events where the segment information was available from the data source, i.e., Compustat PCPLUS. The sample was broken down by the industry classification, and then by the relative diversification position (i.e., high-focused and low-focused) of the issuing firm at the announcement of such issue. Sample events were also categorized by the where the issuing firm has increased focus (i.e., decreased the level of diversification) within the past two years (hereinafter, increased focused sample events) and where firms have decreased focus successively in the past two years[58] (hereinafter, decreased focused sample events).

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[58] This grouping is more restrictive for the focus decreased group than the focus increased group due the limited number of sample events available and also to avoid data overlapping between the group.

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[Insert Table 18 about here]

There are 67 sample events from the Banks, 390 events from the Industrial group and 93 samples from the Utilities. Of the total sample, 470 sample events belong to the low-focused group, and 80 events are in the high-focused group. High focused events are defined as those where the issuer level of diversification as measured by Herfindahl Index (HI) is greater than the median Herfindahl Index of the overall sample adjusted by the industry classification of the sample[59].

For dividing the sample between increased-focus and decreased-focus groups, if a firm is *not* in the focus-increased or in the focus-decreased group, then the event is dropped in that part of the study. There were 34 samples

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[59] For further verification of the grouping other methods of diversification/focus measures are also used by using the number of two-digits SIC code segments and number of four-digit SIC code segments for the issuers. When two-digit SIC is used 445 events were in the low-focused group and 105 events were in the high-focused group, and when four-digit SIC is used the numbers are 427 for low-focused group and 123 events in the high-focused group. but the pattern that most of the issuers are low focused firms remains the same.

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that have decreased the focus level successively in the past two years over the previous year, and 108 sample have increased their focus either in the last year or in the year before. The t-statistics reported in the table 18 indicates that all the abnormal returns are highly statistically significant except for the focus decreased firms.

Table 19 contains the event-day and cumulative abnormal returns differences between the low-focused firms and high-focused firms by the industry classification. The number of low-focused firms out numbered the high focused firms[60]. It is also observed from the table that for the sample from the Banks group, the high-focused firm's market reaction to the seasoned equity offerings is less negative than that of the low-focused firms[61]. The 3-days cumulative abnormal return for the industries are significantly lower for the high-focused firm than the low-focused firm. This results supports the hypothesis developed earlier that high-focused

---

[60] In order to verify this fact, firms which have only one segments over the last three years have been taken off from the sample, even in that case it is observed that the proportion between the high-focused firms and low-focused firms remains the same.

[61] The limitation of Bank's sample events is that only 5 (five) out of 67 sample events are in the high-focused group, which makes any stronger conclusion unwarranted.

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firms market reaction to seasoned equity offering should be less negative (H6) than that of the low-focused firms. The reason being that high-focused firm are viewed by the market as more valuable, as these firms have lower level of information asymmetry due to less diversity in their corporate structure.

[Insert Table 19 about here]

The maximum value losses are observed for the low-focused industrial firms and least value losses for the high-focused industrial firms. Thus it is apparent that the level of firm focus or diversification matters more for Industrial firms than Banks or Utilities. The impacts are more favorable in favor of high-focused firms than low-focused/diversified firms.

The sample was then grouped by the category of focus-increasing and focus-decreasing firms in table 20. The mean of the abnormal returns at the announcements of seasoned equity offerings for the focused decreased firms are low negative/ positive, and are not significantly different from zero. For the focus increased group of the sample, the

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abnormal returns are negative and have statistically significant t-statistics. The phenomenon is also observed for sample events from industrial as well as for Utilities[62]. The mean abnormal return difference between the focus increased and focus decreased group is significantly different for industrial samples.

[Insert Table 20 about here]

These results implies that if issuing firms have increased their focus within the past two years by reducing the numbers of segments within the organization, and then issue equity, the market views that action more negatively. When the issuing firms have reduced their number of segment by selling some of the existing segments, firms should have excess cash in hand or debt capacity outstanding, therefore, if money is really needed, why is the cheapest means of financing-debt is not used? The market recognizes this, and thus reacts more negatively to such announcements by increased-focused firms. Thus, this paper finds support for

[62] For the sample of Banks due to lake of any event in the focus decreased group no conclusion could be drawn.

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the last hypothesis (H7) that focus increasing firms should face more of a negative reaction at the announcement of seasoned equity offerings.

b) Cross Sectional Regression Analysis

Results of the cross sectional regression is produced in table 21. Panel-1 uses the overall sample of 550 sample events. Results indicate that the coefficient of Herfindahl index variable is consistently statistically insignificant, but have positive sign. The coefficient for the dummy variables for focus level (HF/LF-D) is found to be statistically significant and has positive sign. This implies that market's reaction to seasoned equity offerings has a positive association with issuing firms level of diversification/ focus. That is, if the firm is more focused, the less is the negative reaction, hence hypothesis H6 is supported. The coefficients for the variable cash-flow to total assets and market value of assets are statistically significant and positive. The signs and significance levels of other variable used in the regression

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models is similar to what have been observed throughout this paper.

[Insert Table 21 about here]

The results of the total industrial samples are shown in the panel 2 of table 21. The results for the total industrial sample are consistent with the findings of the overall sample, except for the coefficient for cashflow to total assets (CFTA), which is not significant any more but have the same positive sign. The coefficient for the focus level (HF/LF-D) dummy remains consistently positive and significant throughout the models. This findings strongly supports the validity of hypothesis H6. When the industrial sample is categorized by the focus level, it is found that the regression models in the high-focus level (panel 4) have no explanatory power, and none of the independent variables are statistically significant. This could be attributed to the fact that the sample size for this group is very small. For the low-focused group (panel 3) results are consistent with the results of the total sample.

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In order to investigate further the market's differential reaction to seasoned equity offering by the issuing firms focus activities in the past, samples are grouped into the categories of focus-increased and focus-decreased groups. Samples those do not fall in any of this categories are dropped. The cross sectional regressions of the sample groups are produced in table 22. For the total sample (panel A) it is observed that the coefficient for the dummy (INC/DCR-F) to separate the sample between the focus-increased group and the focus-decreased group is consistently negative and statistically significant. When only the Industrial group is used in panel B, the results are the same, except that the level of significance drops as 3-day cumulative abnormal returns are used. This finding supports the arguments developed in hypothesis H7 that focus-increased firms' equity issuance is negatively viewed by the market due to potential free cash flow problems and/or management's inefficiency in the use of funds to finance investment projects. This argument is supported when it is observed that the coefficient for cashflow to total assets consistently shows a negative sign. A stronger conclusion in this aspect could not be drawn due to

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statistical insignificance of the estimated parameter for the cash flow to total assets variable.

[Insert Table 23 about here]

c) Summary

The market's reaction to seasoned equity offerings and corporate diversification reveals that the market's reaction to seasoned equity offerings has a significant positive association with the issuing firms focus /diversification level. That is, if the issuing firm belongs to the high-focused group, then the issue announcement has a less negative impact. The statistically significant difference in abnormal returns exists between the two group in favor of high-focused firms. Thus, the empirical findings here clearly support hypothesis H5. The results of the regression analysis further affirm the findings by showing a significant coefficient for the focus level dummy.

When the results are examined by the focus activity of the issuing firm, it is found that the focus decreased firms

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market reactions to seasoned equity offerings is insignificantly negative. Whereas, the firms which have increased their focus in the past have negative significant market reactions. It is also observed that the mean difference in abnormal returns between the focus increased group and focus decreased group is statistically significant. This result supports the arguments of hypothesis H7 developed in the Issues and Hypothesis section of this paper. The cross-sectional regression result also show evidence supporting the empirical findings.

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VI. CONCLUSION

Until recently the empirical investigation of seasoned equity announcements implicitly assumed that all issuing firms were unlevered firms. This study addresses the issue of market reaction to seasoned equity offering from the perspective of a levered firm. This study documents that issuing firms existing leverage level has a significant impact on the event-day abnormal return of the issuing firm. It is also documented in this study that impacts of leverage on the market reaction to seasoned equity offerings could be positive (growth impact of leverage) or negative (information asymmetry impact of leverage) depending on the issue characteristics, such as, the exchange listing of the issue, the type of the issue, and multiplicity of the issue. It is found that issues from industrial firms listed in NASDAQ market system, combined issues, single issues support the growth impact of leverage hypothesis (H2). Where as the information asymmetry impact of leverage hypothesis (H1) is supported in the samples from AMEX and NYSE listed issues,

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in primary issues and in the issues by the multiple issuers. These finding remain consistent when other factors like the growth opportunities of issuing firms is introduced in the analysis.

Another important distinctive feature of this paper is the relationship between Tobin's Q as a growth measure and event-day and 3-day cumulative abnormal returns is consistently and significantly negative. This result supports the marginal growth argument (H3) developed in this paper. The average Tobin's Q ratio for the issuing firms is very high, indicating that the firms who make the decision to issue equity are firms' with ample growth opportunities. Therefore, the marginal "good news" impact from the seasoned equity issue announcement is greater for the low growth firms than that for the high-growth firm. Combining the arguments of the leverage effect and the marginal growth opportunity effect and the relationship between leverage and growth opportunity the finding of this paper confirms the theoretical argument that growth plays an important role in determining the market reaction to seasoned equity offering, but not in the way the previous works have argued for.

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It is important here to mention the distinctive feature of this study compared to other studies: first, this study includes samples from the NASDAQ market; second, this study excluded sample events which have similar seasoned issue events within a one year period around event date and other similar events within one month of the event date to eliminate any confounding effects. The results indicate that the NASDAQ listed firms loses more value than the firms listed in NYSE. This finding is opposite to what is popularly thought that NASDAQ firms should perform better, as these firms are more rapidly growing firms and mostly technology firms. But the results is consistent with the argument of McLaughlin et al (1998), that smaller firms (NASDAQ) suffer more from information asymmetry problem than the larger firms as more analysts follow larger firms.

The analysis of the impacts of corporate focus/ diversification on market's reaction to seasoned equity offerings reveals that the market reaction is less negative for the high-focused firm when compared with low-focused diversified firms. The argument is high-focused firms are high value firms as well as having less information asymmetry due to their lower level of diversity. Therefore,

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issue announcements by this category of firm has less of a negative impact when compared with diversified (low-focused) firms.

While examining the differential market reaction to equity announcements by focus-increased firms and focus decreased firms, it is found that the market reacts negatively to announcements by firms who have increased their focus level in the recent past. The argument for these focus-increased firms is that the financing need should be met by the funds already acquired through the focus increasing activity in the recent past. Therefore, these firms' additional fund requirements increases the free cash flow problem, and thus should have negative reaction to such announcements. The findings are consistent with the argument, when it is observed that cashflow to total asset has a negative coefficient in the regression result. More importantly, in the regression the dummy for focus activity (INC/DCR-F) is consistently negative and significant.

It is also important here to note that low levered firms issuing equity may signal under-utilization of resources, i.e., inefficiency of management, but under certain circumstance such a conclusion is not always true,

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specially, in case of high technology based firms. A great number of growth opportunities for such firms lies in the possession of technological advancements and/ or know-how. These high technology based firms face a dilemma. They cannot issue debt to finance new projects, because that would increase their overall distress situation. On the other hand, they are high growth firms and they cannot afford to pass the opportunity to invest in new projects. Therefore, it would be interesting to examine how market reacts to these high technology based firms issue announcements.

This paper consistently observes that the significance level of event-day abnormal returns are much higher than that of the 3-day cumulative abnormal return, specially when returns are compared among the groups. Therefore, a further study to investigate the market efficiency of seasoned equity offerings would be of great value. Results not reported in this study also reveal that the mean difference between 5-day cumulative abnormal return 10 days prior to the event date and 5-day cumulative abnormal return 10 days after the event day are not statistically significant. This suggests that the negative reaction to season equity

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offerings may just be the effect of price pressure at the announcement date, but such a conclusion needs further investigation.

Finally, the findings of this paper indicate that the understanding of the market's reaction to seasoned equity offerings is far from conclusive. The results bring into serious question the conclusions of the previous empirical work.

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Figure 1

Figure showing the estimation Period, Event Window, and their relative position

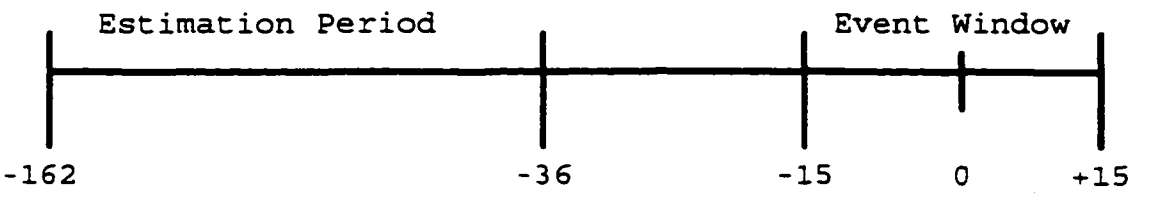

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Table 1

The description of the data collection process from the Primary source - half yearly publication from the Investment Dealers Digest. (a, b, c, d, e, and refers to the selection criteria discussed in the data section of methodology)

Primary[1] Seasoned and Combined[2] Seasoned Equity offerings from the Primary source	**4876 events**
LESS(a & b):	
Sample firms NOT available in Compustat & CRSP data tape for 1996.	2012 events
LESS(c & d):	
Sample Events(Other seasoned equity issues) within the past 12 months or subsequent 12 month period. Other issue(e.g., debt etc., within the days around event date.	915 events
LESS(b):	
Sample Event does not have daily return data data for -162 through +15 days of event date AND, Sample Firms change in Accounting Reporting date between 1983 and 1994.	559 events
Sample events available for study	**1463 events**
LESS(e):	
Sample Firms NOT listed in New York Stock Exchange, American Stock Exchange, or NASDAQ Market System.	36 events
TOTAL Sample Events used in the Study	**1353 events**
TOTAL Sample Firms used in the Study	**984 events**
Sample events dropped as segment data not available for more than seven years in the Compustat tape of 1996	**803 events**
Total Sample Event available for segment analysis	**550 events.**

[1] Primary Seasoned offering refers to the pure seasoned equity offering where no other issue is involved.

[2] Combined Seasoned offering refers to primary and secondary seasoned equity offering at the same date.

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Table 2

The distribution of Sample Events[1] and Sample Firms[2] by Exchange listing[3] - New York Stock Exchange(NYSE), American Stock Exchange(AMEX), and NASDAQ Market system(NSDQ); by Industry classification[4] - Industrial (IND), Banks and Financial Institutions(BNK) and Utilities(UTL). and by the Event year.

YEAR	SAMPLE EVENTS BY EXCHANGE				SAMPLE FIRMS BY EXCHANGE				SAMPLE EVENTS BY INDUSTRY				SAMPLE FIRMS BY INDUSTRY			
	NYSE	AMEX	NSDQ	TOTAL	NYSE	AMEX	NSDQ	TOTAL	IND	BNK	UTL	TOTAL	IND	BNK	UTL	TOTAL
1983	126	16	65	207	126	16	65	207	179	11	17	207	179	11	17	207
1984	30	03	17	50	27	03	15	45	25	09	16	50	22	08	15	45
1985	61	06	43	110	53	05	37	95	67	30	13	110	56	30	09	95
1986	73	08	45	126	58	06	37	101	85	31	10	126	73	22	06	101
1987	56	09	20	85	34	06	16	56	65	10	10	85	45	06	05	56
1988	22	03	11	36	11	02	08	21	25	05	06	36	15	03	03	21
1989	43	14	29	86	30	10	25	65	50	16	20	86	43	08	14	65
1990	35	03	23	61	22	03	14	39	41	08	12	61	29	05	05	39
1991	94	10	61	165	55	04	42	101	107	36	22	165	74	22	05	101
1992	89	15	43	147	52	07	29	88	98	27	22	147	64	13	11	88
1993	120	15	52	187	61	09	32	102	117	35	35	187	69	20	13	102
1994	58	06	29	93	41	05	18	64	67	18	08	93	46	16	02	64
TOTAL	807	108	438	1353	570	76	338	984	926	236	191	1353	715	164	105	984

1 Sample Events are the Seasoned Equity issue events between 1983 and 1994.

2 Sample Firms are the Seasoned Equity issuing firms.

3 Exchange listing is identified through the exchange listing code available in the Compustat Annual data tape.

4 Industry classification is done using the two-digit SIC code, available in the Compustat data Tape.

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Table 3

The distribution of Sample Events by Exchange listing[1] - New York Stock Exchange(NYSE), American Stock Exchange(AMEX), and NASDAQ Market system(NSDQ); and by Industry classification[2] - Industrial(IND), Banks and Financial Institutions(BNK) and Utilities(UTL). Samples are also distributed by the Type of issue - Primary (the seasoned equity issue where secondary issues were not involved on the same date), and Combined (the issues where both primary and secondary took place at the same date). and by the multiplicity of issue (If the firm made more than one issue within the sample period then the issue is a multiple issue, else are Single issue events).

EXCHANGE	PRIMARY			COMBINED			TOTAL		
	SINGLE	MULTIPLE	TOTAL	SINGLE	MULTIPLE	TOTAL	SINGLE	MULTIPLE	TOTAL
NYSE	320	328	648	103	56	159	423	384	807
AMEX	40	32	72	24	12	36	64	44	108
NSDQ	137	113	250	129	59	188	266	172	438
TOTAL	497	473	970	256	127	383	753	600	1353
INDUSTRIES									
INDUSTRIAL	340	249	589	232	105	337	572	354	926
FINANCIAL	112	90	202	17	17	34	129	107	236
UTILITIES	45	134	179	07	05	12	52	139	191
TOTAL	497	473	970	256	127	383	753	600	1353

[1] Exchange listing is identified through the exchange listing code available in the Compustat Annual data tape.
[2] Industry classification is done using the first two-digit if Standard Industry Classification(SIC)code, available in the Compustat data Tape.

Table 4

Descriptive statistics for the Overall sample. Relative Primary and Combined issues refers to issue size relative to Market value of Assets. Adjusted(Adj.) variable are the difference in the value of variable from it's receptive Industry(two-digit SIC) and Exchange median value. For details of the calculation process of the variables please refer to Appendix B.

Variable	N	Mean	Std Dev	Median	Minimum	Maximum
Issue Price	1353	24.0276	14.1349	21.25	1.375	146
Relative Primary Issue	970	0.261	0.3533	0.13	0.00136	3.3174
Relative Combined Issue	383	0.762	0.9942	0.4877	0.0137	10.5573
Leverage	1344	0.2667	0.2187	0.2319	0	1
Adj. Leverage	1343	0.0272	0.1811	0	-0.5203	0.9553
Tobins Q	1353	1.2311	1.3168	0.8643	-0.1737	12.4019
Market-to-Book	1353	1.9208	2.0311	1.3472	1.0053	27.8118
1-Yr growth on ROS	1272	-0.1625	13.9209	0.0217	-340.9	296.9
3-Yr growth on ROS	1276	-0.1646	13.8993	0.0217	-340.9	296.9
Adj. Tobin's Q	1353	0.4823	1.2052	0.0629	-1.6617	11.748
Adj. Market-to-Book	1353	0.1186	1.2477	-0.0021	-5.871	22.6087
adj. 1-Yr growth on ROS	1272	-0.1446	13.9205	0.0285	-341.1	296.8
adj. 3-Yr growth on ROS	1272	-0.1446	13.9205	0.0285	-341.1	296.8
Return on Sales(ROS)	1313	-0.078	3.729	0.1361	-117.6	0.883
Return on Assets	1315	0.1218	0.121	0.1222	-0.661	0.9479
Cash-Flow to Total Assets	1315	0.0551	0.0955	0.0541	-0.6624	0.564
Market Value of Assets	1353	1233.6	4804.3	166.3	2.708	122639

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Table 5

Distribution of segment sample events by the Type of issue - Primary[1] and Combined[2] and by the multiplicity of issue[3] by the same firm. The distribution is presented by the Exchange listing[4] in panel A and by the Industry classification[5] in panel B.

EXCHANGE	PRIMARY			COMBINED			TOTAL		
	SINGLE	MULTIPLE	TOTAL	SINGLE	MULTIPLE	TOTAL	SINGLE	MULTIPLE	TOTAL
NYSE	121	147	268	49	27	76	170	174	344
AMEX	12	11	23	12	07	19	24	18	42
NSDQ	48	43	91	42	31	73	90	74	164
TOTAL	171	201	382	103	65	168	305	245	550
INDUSTRIES									
INDUSTRIAL	135	109	244	92	54	146	227	163	390
BANKS	24	24	48	08	11	19	32	35	67
UTILITIES	22	68	90	03	0	3	25	68	93
TOTAL	192	190	382	113	55	168	305	245	550

[1] Primary Issue refers to the seasoned equity issue where secondary issues were not involved on the same date.
[2] Combined Issues are those where primary and secondary seasoned equity issue took place at the same date.
[3] Multiplicity of issue refers to issue events by each sample firm. If the firm made more than one issue within the sample period then the issue is a multiple issue, else Single issue.
[4] Exchange listing is identified through the exchange listing code available in the Compustat Annual data tape.
[5] Industry classification is done using the first two-digit if Standard Industry Classification(SIC) code, available in the Compustat data Tape.

Table 6

Descriptive statistics for the Segment sample. Relative Primary and Combined issues refers to issue size relative to Market value of Assets. Adjustment(Adj.) refers to the adjustment of the variable relative to the industry and exchange. Adjusted variable are the difference of variable from it's respective Industry(two-digit SIC) and Exchange median value. For details of the calculation process of the variables please refer to Appendix B.

Variable	N	Mean	Std Dev	Median	MIN	MAX
Issue Price	550	24.0871	14.5164	21.5000	1.6250	146.0000
Relative Primary Issue	382	0.2726	0.3714	0.1326	0.0057	2.3354
Relative Combined Issue	168	0.7486	1.0872	0.5102	0.0401	10.5573
Leverage	550	0.2732	0.2251	0.2395	0.0000	1.0000
Adj. Leverage	549	0.0247	0.1785	0.0000	-0.5203	0.6449
Tobins Q	550	1.3117	1.1663	0.9531	-0.0340	12.3180
Market-to-Book	550	1.5029	0.8817	1.3269	1.0053	12.4875
1-Yr growth on ROS	522	0.7604	13.4888	0.0274	-15.5958	296.9000
3-Yr growth on ROS	523	0.7591	13.4759	0.0275	-15.5958	296.9000
Adj. Tobin's Q	550	0.4410	1.0907	0.0884	-1.6617	11.7480
Adj. Market-to-Book	550	0.1019	0.7386	0.0000	-2.1441	9.1501
adj. 1-Yr growth on ROS	522	0.7800	13.4830	0.0348	-15.5540	296.8000
adj. 3-Yr growth on ROS	522	0.7800	13.4830	0.0348	-15.5540	296.8000
Return on Sales(ROS)	528	-0.2657	5.4627	0.1360	-117.6000	0.8830
Return on Assets	529	0.1176	0.1364	0.1205	-0.6610	0.9479
Cash-Flow to Total Assets	529	0.0520	0.1158	0.0604	-0.6624	0.4127
Market Value of Assets	550	1421.9000	6091.6000	221.9000	3.7920	122639.0000

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Table 7

Distribution of segment sample events by the Industry classification[1] and Exchange listing[2] of the sample events. Panel - A shows the distribution for the sample events by the Focus level - high-focus and low-focus; Panel B shows the distribution by the focus activity over the last three years - Increased focus and decreased focus.

	INDUSTRIES			EXCHANGES			TOTAL	
	BANK	INDUSTRY	UTILITIES	AMEX	NASDAQ	NYSE	INDUSTRY	EXCHANGE
PANEL - A								
HIGH-FOCUSED	05	35	40	03	02	75	80	80
LOW-FOCUSED	62	355	53	39	162	269	470	470
TOTAL	67	390	93	42	164	344	550	550
PANEL - B								
FOCUS-INCREASED	10	70	28	07	11	90	108	108
FOCUS-DECREASED	0	22	12	02	02	30	34	34
TOTAL	10	92	40	09	13	120	142	142

1 Exchange listing is identified through the exchange listing code available in the Compustat Annual data tape.

2 Industry classification is done using the first two-digit if Standard Industry Classification(SIC) code, available in the Compustat data Tape.

Table - 8

Event-day abnormal return, 3-days cumulative abnormal return, and 5-days cumulative abnormal return around the event date. Event date is the seasoned equity offering date. Sample are broken down by Industry, Exchange listing, Type of the issue, and the multiplicity of the issuer. Numbers in the Italic are the t-statistics for the abnormal returns. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample events between the Industries.

	% OF POSITIVE ON EVENT-DAY	$CAR_{0,0}$	$CAR_{-1,1}$	$CAR_{-2,2}$
Total Sample (1353)	34.885%	-0.008416	-0.021626	-0.024328
		(-11.8163)	(-1.93871)	(-1.7085)
Banks (236)	41.949%	-0.0061584	-0.0174887	-0.020792
		(-4.2232)	(-7.0945)	(-6.1614)
Industrial (926)	33.153%	-0.0097866	-0.0249151	-0.027326
		(-9.6227)	(-14.4787)	(-12.335)
Utilities (191)	34.555%	-0.0045605	-0.017934	-0.014165
		(-3.8706)	(-5.3319)	(-5.2658)
American Stock Exchange (108)	29.630%	-0.0118388	-0.0258581	-0.030098
		(-4.2486)	(-5.4790)	(-5.0175)
NASDAQ Market System (438)	34.932%	-0.0096865	-0.026187	-0.029278
		(-5.6966)	(-10.0125)	(-8.5659)
New York Stock Exchange (807)	35.564%	-0.0072684	-0.0185847	-0.020870
		(-9.1119)	(-12.3480)	(-10.747)
Multiple Issues (600)	36.167%	-0.0077751	-0.0195346	-0.022475
		(-7.6902)	(-10.9226)	(-9.8468)
Single Issues (753)	33.864%	-0.0089268	-0.0232929	-0.025805
		(-8.0736)	(-12.7017)	(-10.767)
Combined Issues (383)	33.420%	-0.0114059	-0.0272091	-0.028946
		(-6.8148)	(-9.5281)	(-7.8069)
Primary Issues (970)	35.464%	-0.0072355	-0.0194219	-0.225050
		(-8.7313)	(-13.8481)	(-12.380)

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Table - 9

Event-day abnormal returns, and 3-days cumulative abnormal return, and 5-days cumulative abnormal return for the overall sample around the event date of the high-levered firms and low levered firms grouped by the industry classification, by the exchange listing of the issue, types of the issue and by the multiplicity of the issue. High-levered firms are those whose *event year minus one* leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are those where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample events between the Industries.

		$CAR_{0,0}$	$CAR_{-1,1}$	$CAR_{-2,2}$
Total Sample	Low-Levered (687)	-0.00901994	-0.02184419	-0.02375360
	High-Levered (666)	-0.00779306	-0.02140140	-0.02492123
	Differences	*-0.00122688*	*-0.00044279*	*0.00116763*
Banks	Low-Levered (110)	-0.00860890	-0.01784080	-0.02067191
	High-Levered (126)	-0.00401903	-0.01718135	-0.02089591
	Differences	*-0.00458987*	*-0.00065945*	*0.00022400*
Industrial	Low-Levered (502)	-0.00993390	-0.02428773	-0.02549117
	High-Levered (424)	-0.00961230	-0.02565793	-0.02949860
	Differences	*-0.0003216*	*0.0013702*	*0.00400743*
Utilities	Low-Levered (75)	-0.00350533	-0.01136035	-0.01664321
	High-Levered (116)	-0.00524280	-0.01042687	-0.01256249
	Differences	*0.00173747*	*-0.00093348*	*-0.00408072*
AMEX	Low-Levered (74)	-0.01014424	-0.02377340	-0.02790236
	High-Levered (34)	-0.01552703	-0.03039536	-0.03487643
	Differences	*0.00538279*	*0.00662196*	*0.00697407*
NASDAQ	Low-Levered (233)	-0.01082192	-0.02779233	-0.02778555
	High-Levered (205)	-0.00839600	-0.02436161	-0.03097354
	Differences	*-0.00242592*	*-0.00343072*	*0.00318799*
NYSE	Low-Levered (380)	-0.00769609	-0.01782135	-0.02047345
	High-Levered (427)	-0.00688777	-0.01926407	-0.02122287
	Differences	*-0.00080832*	*0.00144272*	*0.00074942*
Combined	Low-Levered (230)	-0.01250668	-0.02886600	-0.03035049
	High-Levered (153)	-0.00975108	-0.02471821	-0.02683521
	Differences	*-0.00275560*	*-0.00414779*	*-0.00351528*
Primary	Low-Levered (457)	-0.00726512	-0.01831023	-0.02043350
	High-Levered (513)	-0.00720910	-0.02041217	-0.02435039
	Differences	*-0.00005602*	*0.00210194*	*0.00391689*
Multiple	Low-Levered (289)	-0.00679392	-0.01934845	-0.02267766
	High-Levered (311)	-0.00868678	-0.01970750	-0.02228623
	Differences	*0.00189286*	*0.00035905*	*-0.00039143*
Single	Low-Levered (398)	-0.01063632	-0.02365642	-0.02453487
	High-Levered (355)	-0.00701012	-0.02288535	-0.02722964
	Differences	*-0.00362620*	*-0.00077107*	*0.00269477*

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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TABLE 10

Event-day abnormal returns and 3-days cumulative abnormal returns for the seasoned equity issue events by the Industrial firms. Sample are split by the low-levered firms and high levered firms with further broken down by the exchange listing, type of issue and multiplicity of the issue. High-levered firms are those whose event year leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are those where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample events between the Industries

	LOW-LEVERED		HIGH-LEVERED		DIFFERENCES	
	Event-day	3-days Cumulative	Event-day	3-days Cumulative	Event-day	3-days Cumulative
TOTAL SAMPLE 502/424	-0.00993390	-0.02428773	-0.00961230	-0.02565793	*-0.0003216*	*+0.0013702*
AMEX 61/28	-0.01294373	-0.02601513	-0.01597460	-0.03760886	+0.003031	*+0.0115937*
NASDAQ 199/155	-0.01016563	-0.02817043	-0.00889383	-0.02657569	-0.001270	*-0.0015947*
NYSE 242/241	-0.00898467	-0.02065951	-0.00933520	-0.02367918	+0.000351	*+0.0030197*
MULTIPLE ISSUER 187/168	-0.00834376	-0.02495967	-0.01102412	-0.02316805	+0.002680	*-0.0017916*
SINGLE ISSUER 315/257	-0.01087789	-0.02388884	-0.00869489	-0.023727587	-0.002180	*-0.0001613*
COMBINED ISSUES 200/137	-0.01289801	-0.02947587	-0.01179954	-0.02729079	-0.001100	*-0.0021851*
PRIMARY ISSUES 302/287	-0.00797091	-0.02085188	-0.00856822	-0.02487848	+0.000597	*+0.0040266*
AMEX - COMBINE ISSUES 21/10	-0.02170565	-0.01823663	-0.00227404	-0.04411968	-0.019432*	*+0.0258831*
NASDAQ-MULTIPLE 72/58	-0.01388433	-0.03577530	-0.00786096	-0.01583633	-0.0199390	*-0.0199390***
NYSE - MULTIPLE ISSUE 89/100	-0.00100277	-0.01487582	-0.01360803	-0.02593927	+0.012605****	*+0.0110635*
NYSE - SINGLE ISSUE 153/141	-0.01362774	-0.02402388	-0.00630482	-0.02207628	-0.007323**	*-0.0019476*
PRIMARY-MULTIPLE ISSUES 120/129	-0.00493202	-0.01795736	-0.01160626	-0.02431573	+.0.006674*	*+0.0063584*

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

Table - 11

The descriptive statistics of Tobin's Q variable used to differentiate between high-growth firms and low-growth firms. Q1-Q3 refers to the mean of 2nd quartile and 3rd quartile of the Tobin's Q ratio. Samples are broken down by the type of industry, exchange listing, multiplicity of the issue and by the type of the issue.

	MEAN	MEDIAN	Q1-Q3
Total Sample (1353)	1.229851	0.862519	0.880239
Banks (236)	1.125218	0.181806	0.954754
Industrial (926)	1.419943	0.995048	1.065508
Utilities (191)	0.900343	0.815083	0.160610
American Stock Exchange (108)	1.423621	1.039118	1.120032
NASDAQ Market System (438)	1.626855	1.137566	1.500464
New York Stock Exchange (807)	0.988445	0.796136	0.631616
Multiple Issues (600)	1.254251	1.609755	0.849879
Single Issues (753)	1.210509	1.385209	0.922627
Combined Issues (383)	1.612180	1.139653	1.181697
Primary Issues (970)	1.078890	0.799130	0.751509

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Table - 12

Event-day abnormal returns, and 3-days cumulative abnormal return, and 5-days cumulative abnormal return for the overall sample around the event date by the low-Growth firms and high Growth firms with further broken down by the exchange listing, type of issue and multiplicity of the issue. High-growth firms are those whose event year Tobin's Q is greater than one(1) and the Tobin's Q is also greater than the industry and exchange adjusted median Tobin's Q. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample events between the Industries.

		$CAR_{0,0}$	$CAR_{-1,1}$	$CAR_{-2,2}$
Total Sample	Low-Growth (845)	-0.00652826	-0.01958619	-0.02055383
	High-Growth (508)	-0.01155609	-0.02501959	-0.03060684
	Differences	+0.005028***	+0.005433**	+0.010053***
Banks	Low-Growth (179)	-0.00590927	-0.01689038	-0.01800872
	High-Growth (57)	-0.00694066	-0.01936770	-0.02953041
	Differences	0.00103139	0.00247732	0.01152169
Industrial	Low-Growth (501)	-0.00762368	-0.02365321	-0.02412345
	High-Growth (425)	-0.01233640	-0.02640270	-0.03110148
	Differences	0.00471272**	0.00274949	0.00697803
Utilities	Low-Growth (165)	-0.00387368	-0.01016181	-0.01247623
	High-Growth (26)	-0.00891952	-0.01480175	-0.02488120
	Differences	0.00504584	0.00463994	0.01240497
AMEX	Low-Growth (54)	-0.00853828	-0.02321064	-0.02131926
	High-Growth (54)	-0.01513937	-0.02850555	-0.03887655
	Differences	0.00660109	0.00529491	0.01755729
NASDAQ	Low-Growth (218)	-0.00496036	-0.02018607	-0.02048789
	High-Growth (220)	-0.01436968	-0.03213263	-0.03798750
	Differences	0.00940932***	0.01194656**	0.01749961**
NYSE	Low-Growth (573)	-0.00693535	-0.01901640	-0.02050678
	High-Growth (234)	-0.00808394	-0.01752766	-0.02175936
	Differences	0.00114859	-0.00148874	0.00125258
Combined	Low-Growth (180)	-0.00580250	-0.02079369	-0.01786809
	High-Growth (203)	-0.01637438	-0.03289755	-0.03876917
	Differences	0.01057188***	0.01210386**	0.02090108***
Primary	Low-Growth (665)	-0.00672471	-0.01925935	-0.02128080
	High-Growth (305)	-0.00834917	-0.01977622	-0.02517420
	Differences	0.00162446	0.00051687	0.0038934
Multiple	Low-Growth (370)	-0.00662853	-0.01828522	-0.01886964
	High-Growth (230)	-0.00961945	-0.02154435	-0.02827431
	Differences	0.00299092	0.00325913	0.00940467*
Single	Low-Growth (475)	-0.00645015	-0.02059958	-0.02186572
	High-Growth (278)	-0.01315836	-0.02789478	-0.03253663
	Differences	0.00670821	0.0072952	0.01067091**

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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TABLE - 13

Event day abnormal returns and 3-days cumulative abnormal returns for the seasoned equity issue events by the Industrial firms. Sample are split by the low-Growth firms and high Growth firms with further broken down by the exchange listing, type of issue and multiplicity of the issue. High-growth firms are those whose event year Tobin's Q is greater than one(1) and the Tobin's Q is also greater than the industry and exchange adjusted median Tobin's Q. High-levered firms are those whose event year leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are those where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample events between the Industries.

	LOW-GROWTH		HIGH-GROWTH		DIFFERENCES	
	Event-day	3-days Cumulative	Event-day	3-days Cumulative	Event-day	3-days Cumulative
TOTAL SAMPLE 501/425	-0.00762368	-0.01958619	-0.01233640	-0.02501959	+0.00471272**	+0.005433**
AMEX 44/45	-0.00795398	-0.02447581	-0.01970846	-0.03473412	+0.01175448*	+0.0102583
NASDAQ 141/213	-0.00327758	-0.02205461	-0.01379984	-0.03105844	+0.01052226***	+0.0090038
NYSE 316/167	-0.00951693	-0.02425197	-0.00848338	-0.01821954	-0.00103355	-0.0060324
MULTIPLE ISSUER 176/178	-0.00851212	-0.02395633	-0.01069202	-0.02427084	+0.00217990	+0.0003145
SINGLE ISSUER 325/247	-0.00714255	-0.02348905	-0.01352142	-0.02793902	+0.00637887**	+0.0044500
COMBINED ISSUES 152/185	-0.00721672	-0.02249224	-0.01675243	-0.03359564	+0.00953571***	+0.0111034*
PRIMARY ISSUES 349/240	-0.00780092	-0.02415885	-0.00893238	-0.02085814	+0.00113146	-0.0033007
AMEX - COMBINED ISSUES 21/10	-0.00277684	-0.02338303	-0.02730665	-0.04785038	+0.02452981*	+0.0244674
AMEX-MULTIPLE ISSUES	+0.00200050	-0.02329038	-0.02156923	-0.03617190	+0.02356973**	+0.0128815
NASDAQ - COMBINED 68/106	-0.00557633	-0.02555193	-0.01865056	-0.03489720	+0.01307423**	+0.0093453
NASDAQ - MULTIPLE 43/87	-0.00438548	-0.01712870	-0.01456359	-0.03169879	+0.01017811*	+0.0145701
NASDAQ - SINGLE 98/126	-0.00279146	-0.02421598	-0.01327248	-0.03061629	+0.01048102**	+0.0064003
NYSE - PRIMARY 247/104	-0.00943826	-0.00703262	-0.02563999	-0.01242480	+0.0162017	+0.0053922**
NYSE - MULTIPLE 122/67	-0.01091445	-0.02642284	-0.00176845	-0.01036252	-0.00914600**	-0.0160603
COMBINED - MULTIPLE 41/64	-0.00655963	-0.02342432	-0.01630184	-0.03569552	+0.00974221*	+0.0122712
COMBINED - SINGLE 111/121	-0.00745943	-0.02214796	-0.01699075	-0.03248496	+0.00953132**	+0.0103370

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

Table 14

Event day abnormal returns of the Overall sample events broken down by the leverage level and growth level. Numbers in the parenthesis are the number of sample events. High-growth firms are those whose event year Tobin's Q is greater than one(1) and the Tobin's Q is also greater than the industry and exchange adjusted median Tobin's Q. High-levered firms are those whose event year leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample between the Industries.

		LOW-LEVERED	HIGH-LEVERED	*DIFFERENCES*
TOTAL SAMPLE	LOW-GROWTH	-0.00738888 (315)	-0.00601676 (530)	*-0.00137212*
	HIGH-GROWTH	-0.01040108 (372)	-0.01471541 (136)	*0.00431433*
	DIFFERENCES	*0.0030122*	*0.00869865****	
BANKS	LOW-GROWTH	-0.00824357 (76)	-0.00418687 (102)	*-0.004056?*
	HIGH-GROWTH	-0.00942552 (34)	-0.00326740 (23)	*-0.00615812*
	DIFFERENCES	*0.00118195*	*-0.00091947*	
INDUSTRIALS	LOW-GROWTH	-0.00884247 (186)	-0.00690401 (315)	*-0.00193846*
	HIGH-GROWTH	-0.01057633 (316)	-0.01743901 (109)	*0.00686268**
	DIFFERENCES	*0.00173386*	*0.010535****	
UTILITIES	LOW-GROWTH	-0.00106201 (53)	-0.00520420 (112)	*0.00414219**
	HIGH-GROWTH	-0.00939150 (22)	-0.00632360 (04)	*-0.0030679*
	DIFFERENCES	*0.00832949*	*0.0011194*	
AMEX	LOW-GROWTH	-0.00449467 (30)	-0.01359279 (24)	*0.00909812*
	HIGH-GROWTH	-0.01399622 (44)	-0.02016923 (10)	*0.00617301*
	DIFFERENCES	*0.00950155***	*0.00657644*	
NASDAQ	LOW-GROWTH	-0.00731447 (75)	-0.00372569 (143)	*-0.003588?8*
	HIGH-GROWTH	-0.01248685 (158)	-0.01916786 (62)	*0.00668101*
	DIFFERENCES	*0.00517238*	*0.0154421?****	
NYSE	LOW-GROWTH	-0.00782891 (210)	-0.00641841 (363)	*-0.0014105*
	HIGH-GROWTH	-0.00753203 (170)	-0.00954995 (64)	*0.00201?92*
	DIFFERENCES	*-0.00029688*	*0.00313154*	
COMBINED	LOW-GROWTH	-0.00859026 (73)	-0.00390057 (107)	*-0.00468969*
	HIGH-GROWTH	-0.01432769 (157)	-0.02335980 (46)	*0.00903211*
	DIFFERENCES	*0.00573743*	*0.01945923****	
PRIMARY	LOW-GROWTH	-0.00702648 (242)	-0.00655206 (423)	*-0.00047442*
	HIGH-GROWTH	-0.00753373 (215)	-0.01029717 (90)	*0.00276344*
	DIFFERENCES	*0.00050725*	*0.00374511*	
MULTIPLE	LOW-GROWTH	-0.00466210 (127)	-0.00765626 (243)	*0.00299416*
	HIGH-GROWTH	-0.00846516 (162)	-0.01236936 (68)	*0.0039042*
	DIFFERENCES	*0.00380306*	*0.0047131*	
SINGLE	LOW-GROWTH	-0.00923090 (188)	-0.00462861 (287)	*-0.00460229*
	HIGH-GROWTH	-0.01189449 (210)	-0.01706147 (68)	*0.00516698*
	DIFFERENCES	*0.00266359*	*0.01243286***	

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table ---15

3-Day cumulative abnormal returns of the Overall sample events broken down by the leverage level and growth level. Numbers in the parenthesis are the number of sample events. High-growth firms are those whose event year Tobin's Q is greater than one(1) and the Tobin's Q is also greater than the industry and exchange adjusted median Tobin's Q. High-levered firms are those whose event year leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of whic· ·ssued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identifi..ion of the sample events Compustat assigned code is used. The same procedure is used to separate the sample between the Industries.

		LOW-LEVERED	HIGH-LEVERED	*DIFFERENCES*
TOTAL SAMPLE	LOW-GROWTH	-0.01848642	-0.02023983	*0.00175341*
	HIGH-GROWTH	-0.02468745	-0.02592807	*0.00124062*
	DIFFERENCES	*0.00620103**	*0.00568824*	
BANKS	LOW-GROWTH	-0.01732883	-0.01654318	*-0.00078565*
	HIGH-GROWTH	-0.02814468	-0.02003922	*-0.00810546*
	DIFFERENCES	*0.01081585*	*0.00349604*	
INDUSTRIALS	LOW-GROWTH	-0.02170288	-0.02480483	*0.00310195*
	HIGH-GROWTH	-0.02580919	-0.02812331	*0.00231412*
	DIFFERENCES	*0.00410631*	*0.00331848*	
UTILITIES	LOW-GROWTH	-0.00881237	-0.01080038	*0.00198801*
	HIGH-GROWTH	-0.01749868	0.00003137	*-0.01753005**
	DIFFERENCES	*0.00868631*	*-0.01083175***	
AMEX	LOW-GROWTH	-0.01666242	-0.03139593	*0.01473351*
	HIGH-GROWTH	-0.0286218	-0.02799404	*-0.00062776*
	DIFFERENCES	*0.01195938*	*-0.00340189*	
NASDAQ	LOW-GROWTH	-0.0192469	-0.02067865	*0.00143175*
	HIGH-GROWTH	-0.03184871	-0.03285617	*0.00100746*
	DIFFERENCES	*0.01260181*	*0.01217752*	
NYSE	LOW-GROWTH	-0.0184754	-0.01932938	*0.00085398*
	HIGH-GROWTH	-0.0170134	-0.01889367	*0.00188027*
	DIFFERENCES	*-0.001462*	*-0.00043571*	
COMBINED	LOW-GROWTH	-0.02115407	-0.02054782	*-0.00060625*
	HIGH-GROWTH	-0.0324518	-0.03441891	*0.00196711*
	DIFFERENCES	*0.01129773*	*0.01387109*	
PRIMARY	LOW-GROWTH	-0.01768172	-0.02016193	*0.00248021*
	HIGH-GROWTH	-0.01901767	-0.02158831	*0.00257064*
	DIFFERENCES	*0.00133595*	*0.00142638*	
MULTIPLE	LOW-GROWTH	-0.01512005	-0.01993945	*0.0048194*
	HIGH-GROWTH	-0.0226633	-0.01887861	*-0.00378469*
	DIFFERENCES	*0.00754325*	*-0.00106084*	
SINGLE	LOW-GROWTH	-0.02076051	-0.02049417	*-0.00026634*
	HIGH-GROWTH	-0.02624894	-0.03297753	*0.00672859*
	DIFFERENCES	*0.00548843*	*0.01248336*	

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table ---16

Event day abnormal returns of the Industrial sample events broken down by the leverage level and growth level. Numbers in the parenthesis are the number of sample events. High-growth firms are those whose event year Tobin's Q is greater than one(1) and the Tobin's Q is also greater than the industry and exchange adjusted median Tobin's Q. High-levered firms are those whose event year leverage is greater than the industry and exchange adjusted median leverage. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. Multiple issuers are those issue events issuers of which issued more than one seasoned equity issue over the sample period (1983-1994). For Exchange identification of the sample events Compustat assigned code is used. The same procedure is used to separate the sample between the Industries.

		LOW-LEVERED	HIGH-LEVERED	*DIFFERENCES*
TOTAL SAMPLE	LOW-GROWTH	-0.00884247 (186)	-0.00690401 (315)	*-0.00193846*
	HIGH-GROWTH	-0.01057633 (316)	-0.01743901 (109)	*0.00686268**
	DIFFERENCES	*0.00173386*	*0.010535****	
AMEX	LOW-GROWTH	-0.00411023 (23)	-0.0121638 (21)	*0.00805357*
	HIGH-GROWTH	-0.01829031 (38)	-0.02740699 (07)	*0.00911668*
	DIFFERENCES	*0.01418008****	*0.01524319*	
NASDAQ	LOW-GROWTH	-0.00536496 (47)	-0.00223389 (94)	*-0.00313107*
	HIGH-GROWTH	-0.01164004 (152)	-0.01915669 (61)	*0.00751665*
	DIFFERENCES	*0.00627508*	*0.0169228****	
NYSE	LOW-GROWTH	-0.01118975 (116)	-0.00854669 (200)	*-0.00264306*
	HIGH-GROWTH	-0.00695461 (126)	-0.1318157 (41)	*0.12486109*
	DIFFERENCES	*-0.00423514*	*0.12326901*	
COMBINED	LOW-GROWTH	-0.00909656 (59)	-0.00602413 (93)	*-0.00307243*
	HIGH-GROWTH	-0.01448869 (141)	-0.02400666 (44)	*0.00951797*
	DIFFERENCES	*0.00539213*	*0.01798253****	
PRIMARY	LOW-GROWTH	-0.00872442 (127)	-0.00727261 (222)	*-0.00145181*
	HIGH-GROWTH	-0.00742408 (175)	-0.01299321 (65)	*0.00556913*
	DIFFERENCES	*-0.00130034*	*0.0057206*	
MULTIPLE	LOW-GROWTH	-0.00749329 (58)	-0.0090129 (118)	*0.00151961*
	HIGH-GROWTH	-0.00872615 (129)	-0.01586748 (49)	*0.00714133*
	DIFFERENCES	*0.00123286*	*0.00685458*	
SINGLE	LOW-GROWTH	-0.00945381 (128)	-0.00564082 (197)	*-0.00381299*
	HIGH-GROWTH	-0.01185266 (187)	-0.01872242 (60)	*0.00686976*
	DIFFERENCES	*0.00239885*	*0.0130816***	

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table - 17

Regression results of cross-sectional regression analysis of Overall sample (Panel A), and Industrial sample (Panel B). The dependent variables is the Event-days abnormal return. Independent variables are: Leverage ratio (LEVRG), Tobin's Q ratio(T-Q), Size of the seasoned equity Issue adjusted by the Market value of assets (ISUSIZE), Cashflow to total Assets (CFTA), Log of Market value of Assets (L(MVA)), Dummy for the Type of the Issue (TYPE) if the issue is a combined issue then TYPE takes value 1, zero otherwise, and another dummy for the Multiplicity of the Issue(MLTPL) where, if the issue is by a multiple issuer then MLTPL takes value 1 else takes the value zero. Dummy XNG1 takes value 1(one) is the issue is listed in NASDAQ, 0(zero) otherwise, and dummy XNG2 takes value 1(one) is the issue is listed in NYSE else take value 0(zero).

	INTRCPT	T-Q	LEVRG	ISUSIZE	CFTA	L(MVA)	TYPE	MLTPL	XNG1	XNG2	ADJ R-SQ	PROB>F
Panel-A												
MODEL -1	-0.00578***	-0.00220***									0.0100	0.0002
MODEL -2	-0.00990***		+0.00525								0.0009	0.1409
MODEL -3	-0.00550***	-0.00226***	-0.00079								0.0093	0.0008
MODEL -4	-0.00357**	-0.00099	-0.00427	-0.00001***							0.0248	0.0001
MODEL -5	-0.00369*	-0.00098	-0.00415	-0.00001***	+0.00144						0.0241	0.0001
MODEL -6	-0.00679*	-0.00094	-0.00567	-0.00001***	+0.00262	+0.00059					0.0243	0.0001
MODEL -7	-0.00644*	-0.00096	-0.00568	-0.00001***	+0.00380	+0.00052	-0.00095	+0.00034			0.0230	0.0001
MODEL -8	-0.00913**	-0.00096	-0.00533	-0.00001***	+0.00340	+0.00056	-0.00104	+0.00033	+0.00368	0.00224	0.0227	0.0001
Panel-B												
MODEL -1	-0.00644***	-0.00233***									0.0103	0.0011
MODEL -2	-0.00963***		-0.00070								-0.0011	0.8845
MODEL -3	-0.00302	-0.00305***	-0.01036*								0.0132	0.0008
MODEL -4	-0.00137	-0.00211**	-0.01265**	-0.00001***							0.0200	0.0001
MODEL -5	-0.00151	-0.00209**	-0.01252**	-0.00001***	+0.00140						0.0189	0.0002
MODEL -6	-0.00416	-0.00214**	-0.01421**	-0.00001**	+0.00162	+0.00057					0.0184	0.0005
MODEL -7	-0.00304	-0.00218**	-0.01394**	-0.00001*	+0.00422	+0.00042	-0.00250	+0.00022			0.0176	0.0015
MODEL -8	-0.00738	-0.00224**	-0.01304**	-0.00001*	+0.00374	+0.00059	-0.00275	+0.00019	+0.00580	+0.002798	0.0186	0.0019

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

Table - 18

Event-day abnormal return, 3-days cumulative abnormal return, and 5-days cumulative abnormal return around the event date. Event date is the seasoned equity offering date. Sample are broken down by Industry, Level of Focus using measure of Herfindahl Index, and by the characteristics whether the firm has increased or decreased focus in the past two years. Exchange listing, Numbers in the Italic are the t-statistics for the abnormal returns. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. For Industry identification of the sample events Compustat assigned code is used.

	% OF POSITIVE ON EVENT-DAY	CUMULATIVE ABNORMAL RETURN ($CAR_{0,0}$)	CUMULATIVE ABNORMAL RETURN ($CAR_{-1,1}$)	CUMULATIVE ABNORMAL RETURN ($CAR_{-2,2}$)
Total Sample (550)	33.818%	-0.0077593	-0.0222482	-0.0253050
		(-6.2234969)	*(-10.3524879)*	*(-8.8348033)*
Banks (67)	38.806%	-0.0061204	-0.0223947	-0.0281230
		(-3.3220608)	*(-5.2758592)*	*(-4.1881187)*
Industrial (390)	34.103%	-0.0081631	-0.0243086	-0.0259596
		(-4.8714528)	*(-8.5253349)*	*(-6.9256363)*
Utilities (93)	29.032%	-0.0072465	-0.0135021	-0.0204041
		(-3.9996239)	*(-4.6325057)*	*(-5.0737493)*
Low-Focused firms (470)	34.043%	-0.0081452	-0.0241938	-0.0270284
		(-5.8453073)	*(-10.2757292)*	*(-8.6946852)*
High-focused firms (80)	32.500%	-0.0054922	-0.0108177	-0.0151799
		(-2.1597445)	*(-2.1474938)*	*(-2.0774432)*
Focus-Decreased firms (34)	41.176%	+0.00032344	-0.0095545	-0.0040735
		(+0.1046223)	*(-1.0687636)*	*(-0.3441721)*
Focus-Increased firms (108)	33.333%	-0.0076122	-0.0247227	-0.0289556
		(-3.0157780)	*(-5.1248885)*	*(-4.8314578)*

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Table 19

Event-day abnormal return, 3-days cumulative abnormal return, and 5-days cumulative abnormal return around the event date of seasoned equity offering by the segment sample. Differences in abnormal returns were also presented, Level of Focus using measure of Herfindahl Index. Numbers in the Italic are the t-statistics for the abnormal returns. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. For Industry identification of the sample events Compustat assigned code is used.

	LOW-FOCUSED	HIGH-FOCUSED	*DIFFERENCES*
TOTAL SAMPLE - 550	*N=470*	*N=80*	
EVENT-DAY	-0.00814518	-0.00549223	*-0.002653*
	(-5.8453073)	*(-2.1597445)*	
3-DAYS CUMULATIVE	-0.02419376	-0.01081770	*-0.013376***
	(-10.2757292)	*(-2.1474938)*	
5-DAYS CUMULATIVE	-0.02702838	-0.01517993	*-0.011848*
	(-8.6946852)	*(-2.0774432)*	
BANKS - 67	*N=62*	*N=5*	
EVENT-DAY	-0.0055017	-0.0137915	*+0.008290*
	(-2.9561326)	*(-1.5461641)*	
3-DAYS CUMULATIVE	-0.0207868	-0.0423336	*+0.021547*
	(-4.7964061)	*(-2.3496704)*	
5-DAYS CUMULATIVE	-0.0255542	-0.0599764	*+0.034422*
	(-3.9655130)	*(-1.3971655)*	
INDUSTRIAL - 390	*N=355*	*N=35*	
EVENT-DAY	-0.0085817	-0.0039178	*-0.004664*
	(-4.8317884)	*(-0.7952301)*	
3-DAYS CUMULATIVE	-0.0261509	-0.0056223	*-0.020529***
	(-8.8371783)	*(-0.5609965)*	
5-DAYS CUMULATIVE	-0.0279010	-0.0066014	*-0.021300*
	(-7.1976959)	*(-0.1711382)*	
UTILITIES - 93	*N=53*	*N=40*	
EVENT-DAY	-0.0083137	-0.0058324	*-0.002481*
	(-3.2544202)	*-2.3082376*	
3-DAYS CUMULATIVE	-0.0150704	-0.0114242	*-0.003646*
	(-3.7735925)	*-2.6762825*	
5-DAYS CUMULATIVE	-0.0229079	-0.0170865	*-0.005821*
	(-4.1643687)	*-2.8987375*	

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table 20

Event-day abnormal return, 3-days cumulative abnormal return, and 5-days cumulative abnormal return around the event date of seasoned equity offering by the segment sample. Differences in abnormal returns between the focus-increased firms and focus decreased firms. Numbers in the Italic are the t-statistics for the abnormal returns. Combined offerings are where on the same event date both primary and secondary seasoned equity is offered. For Industry identification of the sample events Compustat assigned code is used.

	DECREASED -FOCUS	INCRESED-FOCUS	*DIFFERENCES*
TOTAL SAMPLE - 142	N=34	N=108	
EVENT-DAY	+0.00032344	-0.00761222	*+0.007936**
	(+0.1046223)	(-3.0157780)	
3-DAYS CUMULATIVE	-0.00955451	-0.02472270	*+0.015168*
	(-1.06876223)	(-5.1248885)	
5-DAYS CUMULATIVE	-0.00407351	-0.02895564	*+0.024882***
	(-0.3441721)	(-4.8314578)	
BANKS - 10	*N=0*	*N=10*	
EVENT-DAY	-	-0.0025881	
		(-0.6173238)	
3-DAYS CUMULATIVE	-	-0.0314057	
		(-1.6549402)	
5-DAYS CUMULATIVE	-	-0.0292935	
		(-1.4221605)	
INDUSTRIAL - 92	*N=22*	*N=70*	
EVENT-DAY	+0.00226902	-0.00913461	*+0.011404**
	(+0.5201564)	(-2.4695517)	
3-DAYS CUMULATIVE	-0.01057471	-0.02838435	*+0.017810*
	(-0.7705367)	(-4.2042842)	
5-DAYS CUMULATIVE	-0.00310860	-0.03158900	*+0.028480*
	(-0.1803045)	(-3.6773759)	
UTILITIES - 40	*N=12*	*N=28*	
EVENT-DAY	-0.00324346	-0.00560059	*+0.002357*
	(-0.9047715)	(-2.0891593)	
3-DAYS CUMULATIVE	-0.00768413	-0.01318178	*+0.005498*
	(-1.7346361)	(-3.4174632)	
5-DAYS CUMULATIVE	-0.00584251	-0.02225156	*+0.016409*
	(-0.4771906)	(-4.4701742)	

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table - 21

Cross-sectional regression results of the samples used in this section of study. Dependent variable is 3-DAYS COMULATIVE abnormal return. Independent variables are: Herfindahl Index(HI), Leverage ratio(LEV), Tobin's Q ratio, Market to Book ratio(M/B), Cashflow to total Assets(CFTA), Log of Market value of Assets (L(MVA)), Size of the seasoned equity Issue adjusted by the Market value of assets (ISUSIZE). Dummy HF takes value 1(one) if the issuing firms is a high-focused firm and 0 (zero) otherwise, the dummy INC-F takes value 1(one) if the firm has increased focus in the past three years, 0 (zero) otherwise.

	INTCPT	HF/LF-D	HI	LEV	TOBIN'S Q	ISUSIZE	CFTA	L(MVA)	ADJ R-SQ	PROB > F
Panel-1 Overall Sample (550)										
MODEL -1	-0.017649*	+0.014386**	-0.007877						0.0064	0.0682
MODEL -2	-0.009902	+0.015503**	-0.008421	-0.013642	-0.002859				0.0069	0.1061
MODEL -3	-0.009704	+0.013882**	-0.005423	-0.018798	-0.000880	-0.000000			0.0167	0.0163
MODEL -4	-0.012607	+0.014010**	-0.006831	-0.014975	-0.000353	-0.000000**	+0.034801*		0.0205	0.0096
MODEL -5	-0.039082**	+0.010874*	+0.001398	-0.025446**	-0.000333	-0.000000	+0.035469*	+0.003843**	0.0279	0.0027
Panel-2 Industrial-TOTAL										
MODEL -1	-0.019553	+0.020868**	-0.007453						0.0065	0.1044
MODEL -2	-0.007059	+0.022341**	-0.009074	-0.024598	-0.003915				0.0101	0.0951
MODEL -3	-0.006727	+0.021414**	-0.007299	-0.027768*	-0.002710	-0.000000			0.0101	0.1134
MODEL -4	-0.009641	+0.021123**	-0.008686	-0.024664	-0.001780	-0.000000	+0.031682		0.0123	0.0965
MODEL -5	-0.048047**	+0.018115*	+0.002094	-0.041994**	-0.002553	+0.000000	+0.028076	+0.005957**	0.0260	0.0167
Panel-3 Industrial-Low Focused										
MODEL -1	-0.021860*		-0.004836						-0.0025	0.7216
MODEL -2	-0.009061		-0.006868	-0.026081*	-0.003645				0.0009	0.3444
MODEL -3	-0.008702		-0.004957	-0.029647*	-0.002304	-0.000000			0.0014	0.3438
MODEL -4	-0.011557		-0.006308	-0.026773	-0.001325	-0.000000	+0.030396		0.0034	0.2900
MODEL -5	-0.060832***		+0.007114	-0.049684***	-0.002275	-0.000000	+0.024958	+0.007766***	0.02467	0.0172
Panel-4 Industrial-High Focused										
MODEL -1	+0.096681		-0.109915						0.0149	0.2273
MODEL -2	+0.122617		-0.113986	-0.031010	-0.010054				-0.0239	0.5391
MODEL -3	+0.122818		-0.115479	-0.029227	-0.010437	+0.000000			-0.0579	0.7111
MODEL -4	+0.103106		-0.119489	+0.000282	-0.017535	-0.000000	+0.354623		-0.0053	0.4560
MODEL -5	+0.178884		-0.151455	+0.000661	-0.013494	-0.000000	+0.330749	-0.006624	-0.0154	0.4993

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

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Table - 22

Cross sectional regression results for the Industrial sample which have either increased focus or decreased focus in the past three years. Dependent variable is the EVENT-DAY'S abnormal return. Independent variables are: Leverage ratio(LEV), Tobin's Q ratio, Cashflow to total Assets(CFTA), Relative issue size(size of the issue adjusted by the market value of assets). Variable HF/LF-D refers to Dummy which takes value 1 (one) if the firms is a high-focused firms at the issue announcement year and 0 (zero) otherwise. Dummy variable INC/DCR-F takes value 1(one) if the firm belongs to focus increase group and 0(zero) otherwise.

	INTCPT	HI	INC/DCR-F	HF/LF-D	LEV	TOBIN'S Q	ISUSIZE	CFTA	ADJ R-SQ	PROB>F
Total Sample (142)										
MODEL -1	-0.002926	+0.005920	-0.008573*						0.0071	0.2253
MODEL -2	-0.001786	+0.003519	-0.008613*	+0.003028					0.0013	0.3674
MODEL -3	+0.008759	+0.002610	-0.009110*	+0.004997	-0.025515**	-0.000375			0.0290	0.1087
MODEL -4	+0.011178	+0.008006	-0.008807*	+0.001990	-0.037151***	+0.003536	-0.000000**		0.0650	0.0190
MODEL -5	+0.016828	+0.005431	-0.008546*	+0.003022	-0.040510***	+0.001446	-0.000000**	-0.038430	0.0687	0.0198
Panel-1 Total Industrial (92)										
MODEL -1	-0.001645	+0.007576	-0.012557*						0.0097	0.2412
MODEL -2	+0.000011	+0.003837	-0.012667*	+0.006076					0.0027	0.3610
MODEL -3	+0.012858	+0.002027	-0.013362*	+0.011013	-0.036140**	+0.000152			0.0523	0.0861
MODEL -4	+0.015763	+0.010600	-0.013629*	+0.007204	-0.050154***	+0.004780	-0.000000**		0.0983	0.0208
MODEL -5	+0.021331	+0.007117	-0.012671*	+0.007816	-0.053153***	+0.002544	-0.000000**	-0.033549	0.0956	0.0290
Panel-2 Increased-Focused (70)										
MODEL -1	-0.016021	+0.009473		+0.003493					-0.0200	0.7246
MODEL -2	-0.001913	+0.005208		+0.010167	-0.036625	-0.000248			0.0088	0.3394
MODEL -3	-0.000610	+0.016169		+0.004704	-0.050719**	+0.005426	-0.000000**		0.0705	0.0838
MODEL -4	+0.010207	+0.010458		+0.006199	-0.056607***	+0.001630	-0.000000**	-0.049532	0.0738	0.0918
Panel-3 Decreased-Focus (22)										
MODEL -1	+0.030094	-0.056342		+0.028237					0.0499	0.2376
MODEL -2	+0.025627	-0.039775		+0.022106	-0.024776	+0.005480			0.0495	0.3190
MODEL -3	+0.026098	-0.039842		+0.022220	-0.025414	+0.005542	-0.000000		-0.0098	0.4711
MODEL -4	+0.018439	-0.027300		+0.023593	-0.025421	+0.002883	-0.000000	+0.184135	0.0816	0.3113

* (**) (***) denotes significant at the 0.10 (0.05) (0.01) level

Appendix A

Distribution of Sample events by two-digit SIC code representing Industry Classifications assigned by Compustat broken down by Total Sample(1353 sample events) and Segment Sample(550 sample events)

Two-digit SICs	Industry	Total Event	Segment Event	Two-digit SICs	Industry	Total Event	Segment Event
01	Agric Prod-Crops	3	1	47	Transportation Services	1	-
10	Metal Mining	16	4	48	Communications	23	11
12	Coal Mining	1	-	49	Electric, Gas, Senetary Srvcs	191	93
13	Oil and Gas Extraction	51	26	50	Durable Goods-Wholesales	23	10
15	Bldg Constr-Gen. Op Bldr	12	7	51	Nondurable Goods-Wholesale	16	5
16	Constraction-Heavy	3	1	52	Bldg matl.Hrdwr.Garden-Retl	7	1
17	Constraction-Spcl Trade	1	1	53	Gen Marchandise Stores	11	4
20	Food & Kindred Products	15	6	54	Food Stores	8	4
22	Textile Mill Product	15	6	55	Auto Dealers, Gas Stations	2	1
23	Appareal & Other Fnsh Prod.	8	6	56	Apparel & Accessory Stores	9	5
24	Lumber & Wood Pds	8	4	57	Home Furniture & Equip Store	11	7
25	Furniture & Fixtrue	4	2	58	Eating & Drinking Places	24	9
26	Paper & Allied Products	12	3	59	Miscellaneous Retails	18	12
27	Printing, Publishing & Allied	13	5	60	Depository Institutions	106	-
28	Chemical & Allied Products	66	32	61	Nondepository Credit Instn	13	10
29	Pete Refining & Related Ind.	8	6	62	Security & Commodity Broker	9	2
30	Rubber & Misc. Plastic Prod.	12	6	63	Insurance Carriers	54	22
31	Leather & Leather Product	4	1	64	Ins Agents,Brokerage & Srvcs	2	1
32	Stone, Clay, Glass, Concrete	9	3	65	Real Estate	1	-
33	Primary Metal Industries	31	11	67	Holding,other Invest Offices	51	32
34	Fabr Metal, Ex Machy, Trans	12	5	70	Hotels, Other Loding Places	2	1
35	Indl,Comml,Machy,Computer	110	47	72	Personal Services	2	-
36	Electr,Oth Elec Eq, Ex Cmp	90	41	73	Business Services	58	16
37	Transportation Equipmets	30	15	75	Auto Repairs, Srvcs, Parking	2	1
38	Meas Instr;PhotoGds;Watch	61	19	76	Misc Repair Services	1	-
39	Misc Manufacturing Ind	8	2	78	Motion Pictures	5	1
40	Railroad Transportation	1	-	79	Amusements, Recreations	3	3
41	Transit & Passenger Trans	2	2	80	Health Services	34	17
42	Motor Freight Trans,Wrhous	9	3	83	Social Services	1	-
44	Water Transportation	3	1	87	Engr,Acc,Resh,Mgnt,Rel Svcs	15	9
45	Transportation by Air	25	7	99	Nonclassified Establishmedts	1	-

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APPENDIX B

The variable used in the study are calcualted as below using compustat data Item. *Please refer to **Appendix C** for detail understanding of the variable names(DI stands for Compustat data Item).*

Return on Sales, ROS = DI13/DI12.

Return on Assets, ROA = DI13/DI6.

Market Value of Assets, MVA = SUM(DI9, DI10, DI34, DI235).

Return on Market Value of Assets, ROV = DI13/MVA.

Cash Flow to Total Assets, CFTA = (DI13-SUM(DI15, DI16, DI19, DI21))/DI6.

Research & Development Expenses to Sales, RD = DI46/DI12.

Advetising Expenses to Sales, AD = DI45/DI12.

Book Value to Market Value Ratio, BM = DI6/MVA.

Intangible to Total Assets, IA = DI33/DI6.

Net Investment to Total Assets, NITA = (SUM(DI113, DI128,DI129) -SUM(DI107, DI109))/DI6.

Market Value of Capital Stock, MVCS = DI25*DI199.

Market Value of Equity, MVE = SUM(DI235, DI10).

Total Debt, DEBT = SUM(DI9, DI44).

Book Leverage Ratio, BL = SUM(DI9, DI44)/DI6.

Market Leverage Ratio, ML = DEBT/SUM(DEBT, MVE).

Market Leverage as suggested By Pilotte(1992), PL = DEBT/SUM(DEBT, MVCS, DI10).

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Appendix C

The compustat data items used in calculating the variables defined in the paper.

Compustat Data Item #	Compustat Data Item Names
4	Curretn Assets - Total
5	Current Liabilities - Total
6	Asstes - Total/Liabilities and Stock Holders Equity
9	Long-Term Debt - Total
10	Preferred Stock - Liquidating value
11	Common Stock - Tangible
12	Sales (net)
13	Operating Income Before Depreciation
15	Interst Expenses
16	Income Tax - Total
19	Dividend - **Prefered**
21	Dividend - **Common**
25	Common Share Outstanding
29	Employees
33	Intangibles
34	Debt in Current Liabilities
44	Debt Due in One Year
45	Advertinsing Expenses
46	Research and Development Expenses
107	Sale of Property, Plant, and Equipment
109	Sale of Investments
113	Increase in Investments
128	Capital expenditures (Statement of Cash Flow)
129	Acquisitions
199	Price - Fiscal Year - Close
235	Common Equity - Liquidation Value

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PUBLICATIONS AND RESEARCH

Articles Published

1. "Management Control System", *The Bank Review*, vol. 4, December 1983, p11-27.

2. "Zero-base Budgeting - A Novel Approach of Budgeting", *The Accountant*, January 1984, p31-52.

3. "Recent trend in Accounting", *The Bank Review*, vol. 6, January 1985, p3-21.

4. "Stock Market Reaction with Pronouncement of SFAS 95-the statement of Cash-Flow", *Dhaka University Studies -Part C*, Vol. 13, No. 1, June 1992, p56-82.

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6. "Equity Issue Puzzles with Respect to Security Price Behavior: A Test of Relevance of Growth Opportunities and Leverage", *The International Journal of Finance*", Vol. 11, No. 1, 1999 (forth Coming).

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1. "The Impact of Growth Opportunities Vs. Information Asymmetry on Seasoned Equity Offerings: Some Empirical Evidence", Sixth Annual Conference on Pacific Business, Economics and Finance, Hong Kong, 1998 (1st co-author).

2. "Comparative Study of the Rates of Return of Stock Traded on the NASDAQ, AMEX, and NYSE During the 1980's", Fifth Annual Conference of the American Society of Business and Behavioral Science, CA, 1998(1st co-author).

3. "Equity Issue Puzzle with respect to Security Price Behavior: A Test of the relevance of Growth Opportunities and Leverage", Annual Conference of Southwestern Finance Association, New Orleans, LA, 1997(1st co-author).

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4. "The Effect of Seasoned Equity Offerings on Stock Price: A case of Diversification vs. Growth Opportunities-Part I", Annual Conference of Southwestern Finance Association, Dallas, TX, 1998(1st co-author).

5. "The Effect of Seasoned Equity Offerings on Stock Price: A case of Diversification vs. Growth Opportunities - Part II", Annual Conference of Eastern Finance Association, Williamsburg, VA, 1998(1st co-author).

6. "Study of the Stock Price Reaction at Merger Announcements as a Predictor of the Post Merger Performance of the Merger", Allied Academics International Conference, Las Vegas, NV, 1998(1st co-author).

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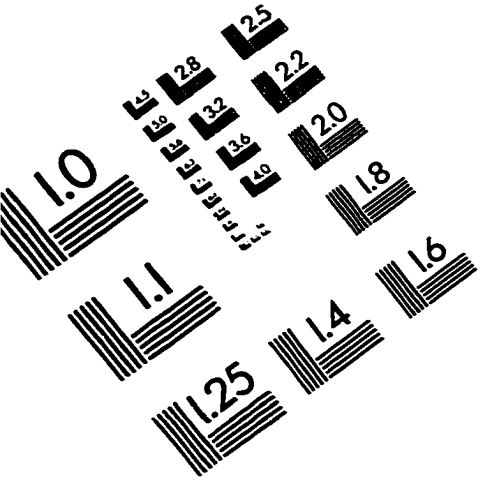
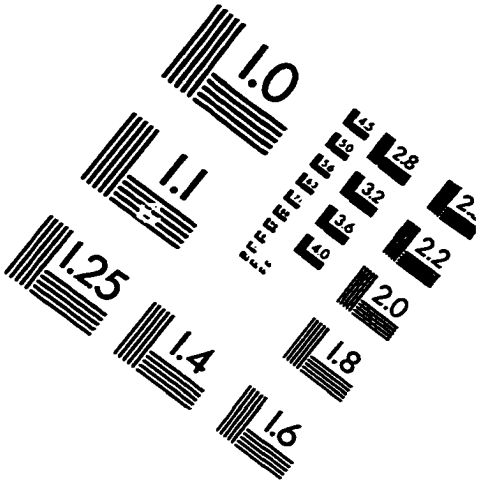
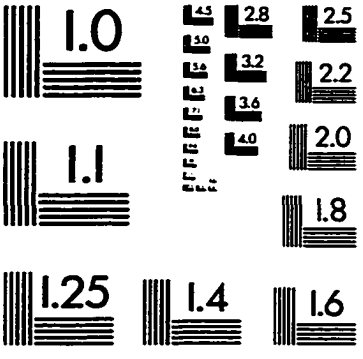
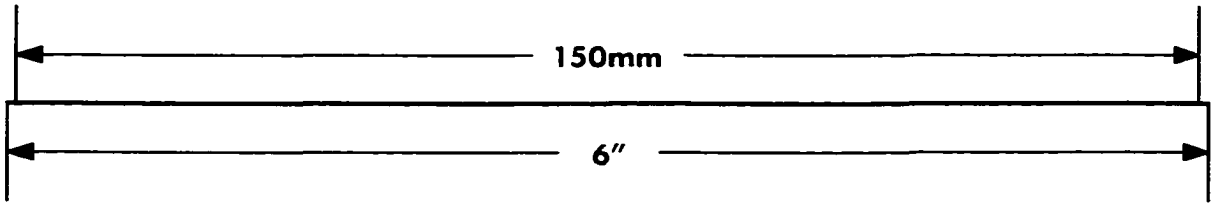
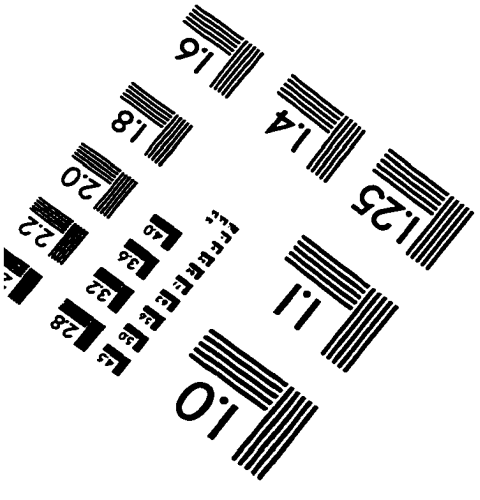
IMAGE EVALUATION
TEST TARGET (QA-3)

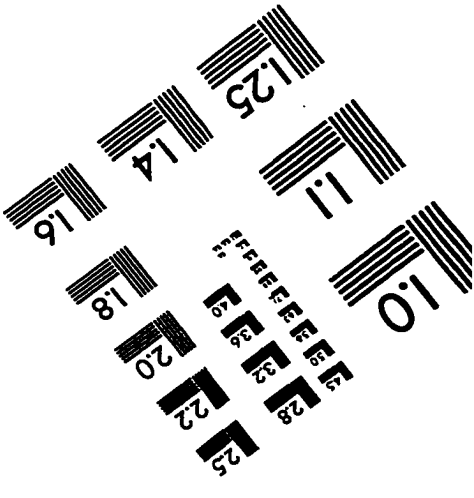












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